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TRANSCRIPT OF RECORD

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1954

No. 162

UNITED STATES OF AMERICA, APPELLANT

vs.

E. I. DU PONT DE NEMOURS AND COMPANY

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

FILED JUNE 23, 1954

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7191 3: P. M., THE SAME DAY. (September 13, 1951).

Present: As before noted.

THE COURT. I have my Sixth Trial Memorandum ready, gentlemen. After you have seen the memorandum do you want to think about it until next week and then come up and see me and have another conference?

Mr. MINICUS. As far as the Government is concerned, your Honor, in the interest of expediting this matter as much as possible we certainly would prefer the second course. We think it would move things along more quickly.

THE COURT. Well, it is onerous on me, but I will assume the task of sitting down with both of you and we will talk "definite and how."

My difficulty, frankly, is this: that if Mr. Gesell comes to me and says, "Judge, what shall I tell my client to do?" I don't know what to tell him. That is the lack of specificity which gives me pause. In our conference perhaps you can tell us how that can be accomplished, and if there is a practical and reasonable method it is going to be followed; because those issues which I have enumerated are with us and I have to have evidence on them, and if Mr. Gesell is going to have the evidence on them you are going to have the evidence on them, and it is just one of those matters which calls for the adoption of some sort of judicial technique whereby we can accomplish the result which is sought for.

7192 Mr. MINICUS. May I suggest one things this is a rather lengthy matter, your Honor, and the staff of men with me are pretty well tied up on this case now. May I suggest sometime in the week of October 1st.

THE COURT. I was thinking we would not finish in one day.

Mr. GESELL. There are two factors about it I would like to mention before we talk about dates. It is quite clear to all of us that were we to follow point 2 it would result in delay of the trial because we cannot put on our evidence and at the same time be engaged in the collection of documents in response to discovery. That is a factor I should think all of us would want to consider. If we are going to adduce documents now after we know what they are, we have to figure out how long it is going to take and we will have, naturally, problems of interpreting and analyzing some of the documents to determine whether or not they come within the request.

THE COURT. If the Government is to have discovery, and I think they should have discovery, that has got to take place sometime.

Mr. GESELL. That is right. It is immaterial to us from that point of view, but it is then a question, however, which relates to your Honor's schedule as to whether the delay is appropriate now

or whether the delay is more appropriate, if I can put it that
7193 way, after the defendant has rested its case and rebuttal testimony is being prepared. So I wanted to mention that.

The COURT. The only thing I had in mind in making the second suggestion was—and I hope that my remarks will not be interpreted as the Court speaking as an advocate on behalf of the Government, but it would seem to me Mr. Minicus would be in a better position to conduct a more intelligent and searching cross-examination of your case, because you will be putting in this material, if he is familiar with it.

Mr. MINICUS. That is what I had in mind, your Honor.

Mr. GESELL. I feel that way, too, but it presents——

The COURT. What I thought was this: if next week is not convenient, then let us select a time and let us get started on it, and as soon as we come to a point where we think we have solved that problem, then let us take up the trial.

Mr. GESELL. I did want to mention that your Honor have in mind now before we get into it that we all feel from what we know that our gang here can't be engaged in both occupations, particularly since we are concerned with the affirmative burden of putting on a case at this time. So if we have that in mind it is quite all right with us to sit down whenever your Honor has a date and talk it over.

Mr. MINICUS. I am available next week, your Honor.

7194 The COURT. Let us start next Wednesday on the 19th and and see how far we can go.

Mr. GESELL. Would that be all——

The COURT. I will take the 19th, 20th and 21st, if necessary. I think once we take the first item, my guess is if we finish a satisfactory discussion as to that, that will form the pattern for all the rest of this business.

Mr. GESELL. I am quite willing to try it, your Honor. We certainly appreciate your being able to give us the time to do it.

The COURT. We may quit within an hour on the 19th. It may become a problem that I find can't be solved that way, but let us at least try on the 19th and see if we can get started on our discussions.

Mr. GESELL. What time on the 19th, your Honor?

The COURT. Let us start at 10:30.

(At this point the hearing was concluded.)

7195 In United States District Court

[Title omitted.]

6th trial memorandum

The Government has filed a comprehensive motion for production of documents under Rule 34. I think the motion has merit,

but its terms are palpably too broad and sweeping. A reading of the motion demonstrates that it fails to meet the requirements of F. R. 34. The fact of the matter is the motion is concerned with issues, the proofs of which have not been brought forward as yet by defendant. These issues must be met, however, and the evidence on them adduced before me by both parties. I think the proper procedure should be something like this: there are two courses to follow:

7196 1. Let duPont put in its case. After that, or after duPont has announced it has finished with its proofs on the matters of substituted materials, post-complaint evidence, and the Olin situation, both Court and counsel shall then be in a better position of focus as to what duPont relies on in these respects. After that, the Government may then renew its motion. At that time, the Government should be in a position to arrive at greater specificity as to what it wants produced. If necessary, I shall delay the trial in order that the production may be had, and as to this, the Government will have additional time to study the produced documents if it so requests. Or,

2. Either the above course will be followed or before we resume the trial at this point counsel will get together and work out with the Court some plan to produce documents on 1. substituted materials; 2. post-complaint evidence; 3. the Olin competition and relationship with duPont. The Court will be available next week if the suggested course is to be followed.

An order may be submitted denying the motion without prejudice.

PAUL LEAHY;
Chief Judge.

Dated: September 13, 1951, 3:00 P. M.
Wilmington.

* * * * * *

7214 Mr. MINICUS. If your Honor please, during the summer recess the Government made two changes in the personnel of its staff. I would like to take this opportunity to introduce Mr. Matthew Miller. Mr. Miller is an accredited member of the District of Columbia bar. At this time I desire to move him pro hac vice.

The COURT. You are admitted to the bar.

Mr. MINICUS. Mr. Miller is appearing vice Messrs. Tubridy and McAuliffe.

The COURT. Proceed.

Offers in evidence

Mr. GESELL. If your Honor please, we are coming to the documentary portion of the defendant's case which we intend to present

in accordance with the arrangements made under your Honor's pre-trial order.

There is before your Honor our documentary case. You will see it stacked up there to the left. There are seven volumes in all and I have also submitted with those seven volumes a smaller volume which I have here, which is the table of contents and index, and if your Honor will look at that first perhaps I can explain the organization of the material.

On the printed pages, the first four printed pages, you will see an outline of the documentary case broken down by volumes and broken down by topical headings. It starts with the market
7215 which will be the first subject of discussion today, and there are under the Roman numerals eleven major topics in these seven volumes. And as against each we have broken down in rather a rough, general way the major groupings of the materials within each of the major sections and have shown the pertinent exhibits alongside.

If you will turn over to the mimeographed sheets you will see a running index of every one of the documents; on the left the exhibit number, its date, a description of it, and a reference to the page where it appears in the printed documents. That is simply a tabulation of the exhibits.

Your Honor will note that there are 978 exhibits which figures at about thirty-five exhibits for every year that we are concerned with in this suit and they cover approximately 2,000 pages.
7216 These exhibits under the pre-trial order were handed to the Government on the 31st of July. If your Honor will turn to Volume 1 we can see a bit more about the arrangement. If you will just open it at any point you will see that the exhibits are bound open, like a book, so that they can be read. The exhibit number appears in the upper right-hand corner, and in the lower right-hand corner you will see the pagination. The exhibits run consecutively in number and the pagination runs consecu ively in number right through the seven volumes. Our presentation, your Honor, is going to be in that numerical order. I doubt if there will be any occasion for my varying from that order, and I am going to take this material up in its numbered exhibit sequence and in accordance with the outline of the table of contents.

The COURT. Are any of these writings subject to attack by the Government?

Mr. GESELL. Yes. I would say that practically all of them are. I doubt if we have filed a single exhibit as to which the Government has not taken six or seven objections. There may be a few. There are very voluminous and extensive objections to every document—authenticity, hearsay, relevance, materiality, self-serving, opinion evidence are some of the main categories of the objections

The COURT. Where are those objections lodged, Mr Minicus?

7217 Mr. MINICUS. The objections have been filed with the Clerk of the Court and also with the defendant, your Honor

Mr. GESELL. Mr McGlothlin has just handed me a tabulation that shows 603 of the 978 exhibits are objected to.

It is our thought that we would take those up in the manner that we took up objections on the plaintiff's case dealing with the section of the documentation and then dealing with the objections to that section.

Mr. MINICUS. If your Honor please, whereas we did in the first section of the Government's case reserve all objections until the end of that section, the purpose there was to wait to see if a conspiracy had been established. We would in certain cases here, as Mr. Gesell did on the Government's case, like to reserve the right to press our objection at the time that the exhibit is offered

Mr. GESELL. That is quite all right with us, your Honor. I thought generally, though, where we had relevance and materiality and other questions if we saw a bit of the evidence we could deal with it more quickly.

Mr. MINICUS. Thank you, sir.

Mr. GESELL. We are going to offer these documents in segments, your Honor.

Now, I don't intend to make any opening statement on the

7218 case as a whole. Your Honor has certainly heard the broad outline of our contentions and we have furnished your Honor and the Government with a trial brief which sets up our position in terms of specific factual contentions. That is the blue bound document, your Honor. As we go along what I want to do at the outset of each section is to key your Honor to our trial brief as well as to the table of contents so that in that way you will have an indication of the contentions to which the evidence is addressed, and I will do that as we go along.

It seems to me that our job here, your Honor, is to present facts I don't intend to make any law arguments in connection with the presentation of the defendant's case, save as they may come up on evidentiary questions unless your Honor asks me to. I anticipate that the Government will resort to law in an effort to avoid the facts or to water down the facts. I do not intend to respond to their statements of the law unless your Honor says "I would like to hear you on the particular legal contentions that are raised," and I will then be prepared to go right ahead and discuss it. But I am going to keep this not to theory, but to fact, on the notion that when your Honor has the facts it will be easier to apply the law.

Our first proof, your Honor, is addressed to the issue of the market. The documents on this are contained in the first two

volumes of our material. If you pick up volume 1 you will
7219 see the index there of what is covered. I think I should point out that one-third of the defendant's documentary case is concerned with this broad issue, one-third of the documents.

Our proof is going to be in three categories. It is going to be these documents, it is going to be statistical proofs, and it is going to include testimony of witnesses, witnesses who were users or sellers or converters of these materials and conscious of the facts in the marketplace. We are only concerned here with the documents. At some point in the documents I intend to introduce the statistics and then when we get to our testimonial case to put on witnesses who will fill in the picture further.

I want to emphasize also that we are concerned here with the cellophane market, not the cap and band market. It is clear on the evidence in the case that the issues as to cap and band and cellophane are distinct. They are different products served for different uses, sold in different channels of trade, and any discussion of the cap and band market will appear in Volume 7, which is the volume where we have gathered together in one place all material relating to caps and bands. I am going to be discussing only the cellophane market.

7220 Since it has been some time, your Honor, since we discussed these issues and in order to point up the significance of our proof I wish, for a moment, to recapitulate what our contentions are as to the market and what we understand the fact issues tendered by the Government.

The COURT. Before you go into that first section of your defense may I ask you this question? Will your testimony proofs follow the same pattern as it set forth in your documentary proofs?

Mr. GESELL. Your Honor, I would not. We will have a main witness who will follow much the pattern here, but other witnesses will be illustrative of some phase rather than covering any broad sweep of the entire market story.

The issues as to the market is not an issue which is brought into this case by the defendant. It is the issue tendered by the Government. It is tendered in paragraphs 11 and 22 of the complaint, and as I will show in a minute it is tendered in great detail by the Government on the opening.

Now, we are concerned, your Honor, with the first two contentions in our trial brief. The first contention which appears on page 2 and which is supported by material in more detail under Roman II at page 5, subsections 1 to 5, and to the section contention that dealing with market control and powers which appears at page 3 of our trial brief and which is covered under Roman III at page 6.

7221 This phase will probably deal almost entirely with sub-paragraphs 6 through 9 of Roman III, 6 through the first paragraph of 9, and the other material under Roman III will come in later sections of the defendant's documentary proofs.

Now, as we concede the issues which were brought to the court by the Government, they are: What is DuPont's power and what was its intent, if we can sort of boil it down to simple statements. It is, of course, essential to all phases of the case, in addition to getting some incite into what defendant's business really is and how it operates, and we will question that through an analysis of the marketing condition.

But we must place particular emphasis, or we place particular emphasis, in this phase of our proof upon the issue of monopoly power, and I think we are in accord with the Government as to what the issue is though we diverge very sharply as to what the facts are.

But if I may read from excerpts from Mr. Minieus' opening in this case I think I can, in a brief, concise way, indicate what this issue was that was tendered by the Government and to which our proof is addressed. These are taken from various places in the opening:

"The problem of market control perforce necessitates res-
7222 olution of a variety of economic conditions attendant upon the industry. The character and nature of the market place and its participants must be ascertained. Each monopoly case is sui generis. Either the market have the industry so controlled or they are not. This economic analysis of the position of the defendant in its particular market setting is the key to measuring the degree of its control.

"It is not too much to say that current interpretation of Section 2 presents the central issue of doctrine in the entire field of anti-trust law. The concept of market control, the power to effect prices, is inextricably conjoined with the problems pertaining to market control. It is, in fact, the principal manifestation and ability and evidence of an ability to control markets.

"The Government's position is that at all times the defendant possessed and exercised absolute power to fix arbitrary, non-competitive prices for cellophane. It was possible for the defendant to ignore the interplay of influences present in a freely competitive market and necessitate to fix its prices at a level designed to yield a consistently high pre-determined high margin of profit."

Those are all excerpts from the Government's opening in this monopoly case. The Government puts to the Court that we must analyze the market, we must look at the economic factors attendant in the market and that they must show, to carry the day

how they must show monopoly power as they have
7223 [illegible] it.

Our proof is directed toward showing that when the market is understood, when the factors existing in the market are understood, that that power does not exist.

As your Honor said in his fifth trial memorandum under which we are offering this proof, "It is understandable that the defendant should be afforded an opportunity to present its theory of the market."

All I can say is that we are not concerned with the theory of the market. We are concerned with the facts of the market.

There are three essential inquiries, I think, your Honor, here, of a factual character. The first is, what are the characteristics of the market? Is it something separate and distinct where manufacturers of cellophane are the primary or sole sellers of a more or less unique product? Or is it a market where manufacturers of other materials compete directly on more or less equivalent terms?

Then, if the answer to that is that it is a market where other manufacturers compete, the next fact inquiry is: Is the nature of competition within the market such as to give DuPont market control, or is DuPont so subject to the pulls and tugs of a highly competitive situation that it lacks such power?

7224 Over the whole situation is the third fact issue: Did DuPont act with the intent and purpose of monopoly, or were its acts done for the lawful purpose of competing?

Now, we say it is not a separate and distinct market. The Government says it is. We say that cellophane competes with other flexible packaging material. The Government denies that and states categorically there is no competition in the market between cellophane and other material, that they don't compete. In fact, in response to constant questions by the Court on their case that assertion was made several times. Of course, we have an issue as to intent.

If your Honor please, there is a phrase pertaining to this that I want to talk about for a moment. The Government has continually referred to these other competing materials as substitute materials. I simply want to earmark the fact that as the proof comes in your Honor will see that they are not substitutes; that we are not concerned with the case where under certain conditions something else can come into the market and take the place of cellophane. We are concerned with the situation where the competition exists in fact, and if there is any substitute it is cellophane seeking to penetrate an established market for materials of already entrenched and where they are sold in large volume.

7225 Now, I want your Honor to do one more thing before turning to the documents themselves. You will see that we

have here presented studies of six different—you might call them end uses or segments of the market—the baking industry, candy, frozen food fresh products, potato chips and snacks, and macaroni in the cereal products. Now, we are going to review each of those industry end uses, but there are certain central facts which we believe these documents show as to each of those six end uses. There are certain central facts which we want to prove by our documents as to each of those end uses, and I want briefly to state what those basic facts are so that as we go through the documents your Honor will know what I am trying to prove and can perhaps better appreciate the significance to us of certain evidence which we tender, and I call these the central themes of the documentary part of this market section proof, and I want briefly to indicate them to your Honor so that we may look for them in the material that comes.

Mr. MINICUS. If your Honor please, before Mr. Gesell goes into a discussion of these documents I pick this time because it is prefatory, so we will understand each other perfectly, I wonder if we could focus the issue. Mr. Gesell's last statement before approaching the documents was that these products are in competition.

Do I understand him to mean that if there is a product in a
7226 market over here, as he stated, and another one in a market here, and this product in this market is attempting to enter this market, is trying to get into it, that they are now presently in competition? I don't understand that statement, your Honor.

Mr. GESELL. These seven themes, your Honor, which I want to take up cover in detail what our position is on the evidence in each of these particular categories. Now, the first theme is this: That the nature of the product to be wrapped and its marketing and trade customs determine what characteristics the material must have to compete. We must first look at the nature of the product and the conditions that exist as to its marketing and trade customs to understand the competitive problem. Second, that as to each of these end uses there are a number of materials that meet the requirements in varying degrees of each particular market or end use, and that a composite of properties—no one particular property, but a composite of properties is necessary and desirable as to each end use. Third, that the packagers and the other customers select the material, not the seller; that the customer is constantly reviewing and analyzing the relative merits of the materials and constantly shifting his business from one to the other on the basis of functional properties and relative costs, and that there is keenly among the manufacturers of these materials advertising as well as services selling and other
7227 efforts to bring their goods to the attention of the users. Specifically, that there is both price and quality competi-

tion between cellophane and the other materials, and that the sales of a particular manufacturer improve as quality improves or lowering of prices takes place; and that that has brought about a constant, sharp competition as to price and quality among these materials, and that there is a constant shifting of business back and forth; and, finally, that the largest volume sellers, glassine and wax paper are the first of these materials; that they are sold in the biggest volume; that they are entrenched; and that Du Pont is seeking by energetic and effective competitive means to get its material recognized and to compete. As your Honor is aware, we are looking at a segment of this broad packaging market only, but in that segment we intend to review in some detail all phases of the competitive picture.

Now, the first group of documents is the group that goes from 1 to 73, inclusive. You will see that on the outline "The Baking Industry"—and if I may, your Honor, in a prefatory way I would like to point out that the baking industry accounts for roughly thirty percent. of all of DuPont's cellophane sales. That has already been established. Therefore, as the largest single end use we place particular emphasis upon the baking industry.

The two most important sections in these two volumes on the market from the point of view of the defendant are the
7228 baking industry under I-A-1 and the material that is compiled together at I-D at the end of Volume 2, "Defendant's Awareness." I intend to spend the most time on those two sections and to deal with the other material in more summary fashion.

In each case, if your Honor please, these documents that are grouped here by categories cover a span of years. They are arranged chronologically. They start with the early incidents and they go through. They are also of great variety. We use ads, we use trade reports, we use marketing surveys, we use correspondence, we use technical studies, we use sales bulletins, and what we have done is select here for the purposes of illustration only documents of a chronological character giving a picture of some of the conditions in the market. They do not tend to tell a completely connected story; they are illustrative and will be filled in by the other proofs as they come along.

At this time I offer Exhibits 1 to 73, inclusive, with the exception of Exhibits 17 and 45 which defendant withdraws in this group, and I state with respect to this offer, your Honor, that the advertisements which appear here and indeed the advertisements which appear throughout this proof are not offered for the purpose of proving the facts stated in the ad, but merely for the purpose of proving that the advertising appeared and that the

representation shown by the advertising was made. In
7229 no case do we rely on ads in proof of facts stated.

Mr. RENNINGER. If your Honor please, I think perhaps in reference to the ad we should make an objection at this time, sir. Even though Mr. Gesell has stated that their introduction of these various newspaper advertisements is not for the purpose of establishing the proof of the statements contained therein, nevertheless there are various other statements appearing there that I am sure he is relying on and attempting to draw inferences from, which I don't think is the property of such trade journal advertisements.

The COURT. Let us sharpen our sights and take a typical advertisement.

Mr. GESELL. Exhibit No. 1 is a typical advertisement, your Honor.

Mr. RENNINGER. That is not a typical advertisement, your Honor.

Mr. GESELL. Let us take the first one. In the lower left-hand corner is an advertisement that appeared in the Bakers Weekly of January 5, 1924. The lower left-hand corner is the advertisement offered. There is a piece of bread wrapped in wax paper and it shows the representations of a wax paper company in the bread field with respect to the availability of its product in roll and sheet forms for use on the machines.

7230 The COURT. Mr. Renninger is making the attack at this point, so let him select his weapon. Which ad do you say should not be received in evidence for the reasons stated by you?

Mr. RENNINGER. If your Honor will look at Defendant's Exhibit No. 60 as an example of Defendant's Exhibit No. ——

The COURT. What is wrong with No. 60?

Mr. RENNINGER. In the first place, it says, "Five out of eight buy Riegel."

The COURT. Mr. Gesell says he is not relying on the statements of fact contained in those ads. He wants to merely use them for illustrative purposes.

Mr. RENNINGER. In what way does he mean illustrative purposes, your Honor? If he means he wants to show that these various so-called competitors advertised in various newspapers and trade journals during the whole period, we are perfectly willing to stipulate to something of that nature.

The COURT. Let us take No. 60, Mr. Gesell. Why are you relying on Defendant's Exhibit 60?

Mr. GESELL. I want to show that as of this time Riegel, the evidence will show, was one of DuPont's competitors in this field, was still vigorously advertising its material for use on

crackers and pretzels. I am not going to claim that five out of eight buy Riegel, but I would not be surprised if that is true; but I do not rely on this to prove that fact. I simply want
7231 to show that that is what was happening in the market-place. We are concerned with a study of this market.

The COURT. This is more of a discussion caused by my first inquiry, I suppose, but if there is a specific objection before me I am prepared to rule on it.

Is there one?

Mr. RENNINGER. Yes, your Honor.

The COURT. I overrule it. Proceed, Mr. Gesell.

Mr. RENNINGER. If your Honor please, I think perhaps at this time I would like to state for the record that all the defendant's exhibits contained in Volumes No. 1 and 2 relating to substitute materials——

The COURT. That comes within the compass of Mr. Minicus' objection which he articulated some time ago.

Mr. RENNINGER. Yes. Your Honor, we also have various other objections to other exhibits contained in this first group of the defendant's exhibits that Mr. Gesell has just introduced into evidence. Perhaps it would be better to wait until we reach those exhibits to discuss them, or would you like to discuss them at this point?

The COURT. I thought we were going to do it by section.

Mr. GESELL. I would like to do it at the end of the group, your Honor.

The COURT. I would prefer that.

7232 Mr. GESELL. He can do it at the end of the bakery group.

Mr. MINICUS. There is another type of objection, your Honor. That was to the advertisement. Now we have another type that we would like to get settled.

The COURT. I have settled it. I have overruled your objection.

Mr. GESELL. They objected to every ad in this.

The COURT. On that same ground?

Mr. MINICUS. No, not on the advertisement ground. On other grounds, your Honor.

The COURT. We will await Mr. Gesell's discussion of the first 73 exhibits and then we will hear from the plaintiff as to your objection. If you have one or one hundred I will hear them.

I think I will take that back.

Mr. RENNINGER. If your Honor please, the difficulty with that is I think half of the exhibits in this first 73 relate to our objection.

The COURT. I think I will hear you after Mr. Gesell finishes his discussion as to the exhibits. I will find myself lost if I stop every time he offers a paper.

Mr. GESELL. What I think they want to do, your Honor, is to get straightened out as to whether or not so-called trade re-
7233 ports are admissible. It is one broad category of document that appears through here. We will discuss some of them in this section, and I think your Honor will see the kind of material it is and get a better idea as to its pertinence.

Mr. MINICUS. That is our point entirely. The question is whether they should even be discussed, your Honor. The grounds on which we are objecting to them are that they are such rank hearsay that they should not even be introduced or the Court should not take notice of them. They are absolutely worthless as such. That is why we would appreciate an opportunity to consider certain of them at this time.

The COURT. Well, my preference is to look at the totality of any particular section of documentary proof that Mr. Gesell offers, and then after examining it I will be in a better position to see just what part of the mosaic that fits into his pattern of the defense proof.

Mr. MINICUS. Very good, your Honor.

Mr. GESELL. One other prefatory remark—I seem to be making a number of them, your Honor, but we are sort of settling down here again—as you know, under your Honor's ruling I was precluded from discussing the Government's proof on many phases of this market business. I am not going to go back and discuss the Government documents now. I prefer to discuss my documents. But I will refer to some of the Government material
7234 as I go along in order to give some indication to the Court of what is in this case already on this phase and to orient it; but I am not going to go back and turn pages of the Government's proof. Of course, there is much of it to the same effect as this already in the case.

Baked goods, your Honor, represent about 30 per cent of Du Pont's sales. Du Pont sells cellophane to wholesale bakers and grocery chains and house-to-house bakers. This field includes such things as bread, cakes, doughnuts, cookies, rolls, and so forth. There has been an enormous growth of business by Du Pont in this field going from 3,200,000 pounds in 1932 to over 17 million pounds in 1939, and it is more than that at the present time.

Since this is the first of the sections I would like to turn to each exhibit with the Court briefly and point out its significance. We have already discussed Exhibit No. 1. There you will see in 1924 the advertisement of the Shawmut Waxed Paper Company of its material as available for automatic machines and hand wrapping for bread wrapping.

You will see in No. 2 a list of various waxed and parafline papers manufacturers on the third column about half way up on the right-

hand side under the heading "Waxed and Paraffine Papers." You will see some of the manufacturers in the business at this early date, 1924, including Shawmut, whose ad we have seen.

Exhibit No. 3 you find an ad of the Central Waxed
7235 Paper Company again in this field, in this business, representing the availability of its goods. They refer there, your Honor, to printing of wax paper, showing that that paper is printed and available, and you will notice that they say they have wrappers for all kinds of different articles in the field, including the specialty breads which are listed there.

Consolidated Papers' ad is at page 4 to the same effect. You will notice there they are emphasizing in the market not only availability of their product, but the ability of it to be sealed tight, to keep the bread moist, a problem which we will see was one of the problems in the market place.

In Exhibit 5 you will see——

Mr. MARCUS. If your Honor please, it is one thing for Mr. Gesell to say he is not relying on these portions of the ads for proof and then to come forth and present them to the Court as statements of fact. That is the very thing we were afraid of in this advertisement business. If he is putting the ad in to show that certain companies advertised, all right; but once he starts to talk about the sealability presented in the ad we are into a hearsay statement, and I think the proper way to do it would be to put a witness on the stand in this industry and tell us what this thing will do and not give a salesman's puffs, unverified language as it appears in the advertisement. That is the entire basis of our objection in all these advertisements. The representa-
7236 tions in the ads are presented to the Court for the truth of their statements.

7237 In Number 5, your Honor will see that Newark Paraffine is representing the availability of its product, and you will see representations directed to the various problems which we are going to see are attendant in the market. Representations as to——

The COURT. I was going to make an inquiry. Do I understand your position to be that these illustrative bread wrappings of wax paper—is it your theory that particular product is in competition with cellophane today?

Mr. GESELL. Wax paper?

The COURT. No, wax paper as shown in 1924.

Mr. GESELL. We say that wax paper is in competition with cellophane and has been throughout this period and that glassine is.

Here we have evidence simply of representations in the market place by the manufacturers. We will then come to concrete illus-

trations of the competition, not in ads but the others. This is the last of this group of ads.

The COURT. Proceed.

Mr. GESELL. You will see that they appear, both glassine and wax paper bags, in that advertisement.

The next is a telegram dated 1926 to Dr. Benger, one of the technical men in the cellophane development. They say they are visiting Johnson Educator Biscuit Company. This is in
7238 1926. Look at what the Biscuit Company says. They are disgusted with cellophane because they employed it with the understanding it was moisture proof. In 1926, we didn't have our moisture-proof product out.

The next is a letter to Mr. Benz from Webster in the technical phase of the work, and you will see a follow-up discussion of the Johnson Educator Biscuit problem, which is here by way of illustration.

You will see in the last paragraph on page 7, the first page of the letter on page 7, a discussion of the problem raised by Johnson, we say, "As a rule it would seem to be unwise to use cellophane wraps on the crackers and cookies which must be kept perfectly dry."

There is an analysis on page 8 of the problems that we are up against in getting into this field with plain cellophane, which has not the the requisite qualities to meet the requirements of the market and trying to find a way to do it.

7-A is the first. In some cases where legibility was uncertain you will find an A number and that is the same exhibit retyped so your Honor can read it.

Number 8 is merely a reply pointing out the desire of the sales people. We are going to keep in touch with these people. We want them to be users of an odorless, waterproof cellophane which can be sealed.

The COURT. What are these other code numbers that
7239 appear on these documents, for example, on Defendant's Exhibit 8? There appears a pencil notation "M1064."

Mr. GESELL. That is a number that was placed on at the time it was taken from the files. It is an identifying number. It has no evidentiary significance at all.

The COURT. No significance as far as I am concerned?

Mr. GESELL. No. Then you see here another Oatmeal Cookie case in 1926 in the second paragraph where the evidence shows that these manufacturers are contending that cellophane won't handle their goods in humid weather. They stick together.

Then we go along to 11 and here is the one of several technical studies which are in here. This is now 1927. This refers to a visit to the Purity Baking Company.

I ask your Honor to stop at this one a moment and look at this: "She gave us some rather startling results, and we feel that something should be done about it." He refers to the fact that they are testing cellophane against wax glassine paper, and you go on and you will see the results of the tests which show that wax glassine, the competitive material, is better in all respects on the basis of the tests.

Then over in 1927 again on Loose Wiles Biscuit Company—by the way, your Honor, as we go along look at the names of
7240 some of these concerns. You will find they are large concerns and well staffed with research and other people to test these materials.

Here we are trying to get on to fruit cake. You notice, "Moisture proof cellophane to date lost 1.3 per cent in weight." Glassine has them licked. It only lost .3 per cent. Waxed sulphite paper has them licked. It lost only .9 percent.

These results indicate that moisture proof cellophane is far below the other moisture proof wraps.

This is the market we are trying to get into in 1927, your Honor. It says, "To date, the moisture proof cellophane seems to be holding up equally as well as the waxed glassine paper," and then there are suggestions for further study.

Now, we come to the first of a number of these trade reports. I might say a word about the trade reports in their form at this time. These are routine documents in the regular course of business sent in by the salesmen reporting on their calls on different customers.

In this case it is Loose Wiles in 1927. They are still working with the problem with Loose Wiles trying to get their material accepted. You will see that the report is Watterson, the man at Loose Wiles, and he is still of the opinion that he has to use two wraps of cellophane to moisture proof a fruit cake. Your
7241 Honor understands that substantially increases the cost of wrapping.

We follow out the story a year later in Exhibit 14 still with this particular company where we are trying to get cellophane sold to this concern. In the first paragraph their laboratory man says: "That the permeability factor would have to be considerably better than those secured last year." There is a discussion of greased cellophane sheets in the second paragraph, but they are reported to have allowed three times as much moisture to pass through it as ungreased sheets, and this he claims is far inferior to their present waxed glassine paper.

In the conclusion of the Schilly research service man he states, "To all appearances we apparently have lost the use of moisture proof cellophane on fruit cakes by this concern, unless you might

have something to offer which may offset this loss in moisture-proofness due to contact with a film of grease.

The product that has got it is wax glassine.

In Exhibit 15 you will see further reference to that.

In Exhibit 16 we are at another company now, another trade report, the Thomas Roulston Company. The report is that this concern has run trial tests for iced cake with moisture-proof cellophane and they claim the icing hardens, becomes brittle and
7242 breaks when attempting to cut the cake and that this did not occur when their cakes were wrapped in waxed glassine.

There again we are seeking to get into this field where the competitive material is established.

Exhibit 17 we skipped. It was not offered.

Exhibit 18 is a report which I wish to mark for your Honor's particular attention and which I wish to discuss.

This is one of a number of market survey reports which you will find in these exhibits. This one is dated April 28. These market survey reports come up from the sales promotion section of the company, which is a part of the promotion and advertising work, and from time to time were made in particular industries and particular areas for the purpose of gathering together the material which could be used by the salesmen and in advertising and promotional displays.

Mr. MIXICUS. The objection here, your Honor, is not one of the substance of Mr. Gesell's statements, but the form in which the exhibit is tendered. Therefore, I don't think anything would be gained by waiting to the end of the section. We might as well get this problem settled.

You will note that on page 24 it specifically says that this is an extract. Now, it is not this extract alone that we have objection to. There are many extracts as we go through the case that
7243 we have very very real objection to and we would like to have some understanding on it now.

Your Honor will remember that during the course of the Government's case we attempted to limit our documents to certain proofs that we only would offer any proofs. However, we always offered the complete document.

Now, here, beginning at this point and throughout all the defendant's documents we have the admitted excerpts and extracts. That is a very fine way to avoid your Honor's ruling and deprive us of the opportunity of commenting upon the entire document, to put in an extract.

We feel that very often in these extracts that the meaning relied upon by the defendant will be changed if we are permitted to comment on the document in its entirety; that other parts of a document that now are not before the Court will change the en-

tire connotation of the document that is presented to you as an extract.

The COURT. Do you know that to be the fact, or is that your guess?

Mr. MINICUS. It is our interpretation, your Honor. The decision will be made by you. I don't say that as to this document.

Mr. GESELL. May I make a comment on this?

The COURT. Yes.

Mr. GESELL. The Government used throughout the case
7244 extracts. We used throughout our case extracts. We think it is a way to reduce documentary proof. In every case where the Government has requested it we have shown the entire document. We are prepared to show the entire document of any other extract they want.

This procedure is consistent with the recommendations to the judicial report on which your Honor's name appears, and the only way to bring in a case of such magnitude and put it forward and then for them to come here and say it is for purposes of concealment I think is unfair. They have checked many of these extracts in detail.

Mr. MINICUS. It has been claimed that the Government used extracts. The Government never extracted any document. Where we used extracts, your Honor, was where the defendant claimed privilege or something else and would not give us the whole document. There we were forced to put in what we had and they could not object to it on that ground.

The COURT. You have heard Mr. Gesell's suggestion here, that you can see any of the basic, fundamental data upon which the extracts are based, and my ruling is, if for no other reason than to save my own poor eye sight, I am going to allow these proffered extracts into evidence and you are to have opportunity if you want to see if there is any other material which you think was unreasonably withheld from the Court's attention.

7245 Mr. MINICUS. That is an offer that should have been made to us months ago, not at the eve of a trial. It wasn't up to us to say, you people have put in extracts. Let us see the rest of it. I imagine a more lawyer like way to do it would be to have the entire document available. This document has never come up before.

The COURT. Until there can be some challenge on the validity of these extracts by specifically pointing out wherein they do not completely inform the Court of all the facts, my ruling is that they are to be allowed into evidence.

Mr. MINICUS. May I have a continuing objection to all extracts used, your Honor?

The COURT. Yes, sir, and with full opportunity reserved to you that if you seek discovery while the trial is going on of any particular extract and then you want to call that to my attention that it is not complete, I will hear you at length on your original objection as to whether the extract method should be used.

Mr. MINICUS. At this time I think we are within our rights to call up every document in its entirety which is extracted in the defendant's case.

The COURT. That is a pretty big order.

Mr. GESELL. Particularly since we have sent them the great bulk of this material. I don't see why I have to do it twice.

7246 Mr. MINICUS. Those are not all the extracts that are in this case, by any means.

Mr. GESELL. This procedure has been going on for two years that they checked these extracts. If they want a particular document they can have it.

The COURT. Here I find myself getting caught in the trap again of trying to rule on generalities as to groups of evidence. I tried to do that because I thought it would better expedite the trial.

At this moment I am directing my attention to Defendant's Exhibit 18. If there is objection there, it is overruled.

Proceed, Mr. Gesell.

Mr. GESELL. This study is a special report on cakes dated April, 1928. It is typical of other studies to comment on its format and development.

You see first the statement of the objector. They look like a logical outlet. A survey is being made to see how we can get into that business. Mr. Rankin, one of the investigators, has made a field study. Then there is an analysis of the cake problem, the kind of reasons why they should be wrapped and why wax paper came into popularity in 1925.

At the bottom of 25, there is a discussion of how the glassine people moved into the market with waxed glassine to compete with wax paper and an analysis of the distribution.

7247 How do cake people sell? How can we take advantage of the way they sell to show them the meaning of cellophane and what it can do? There is a detailed study of the market and the selling practices.

On Page 28 there is a discussion of the great necessity of preserving these goods from the point of view of freshness against stale returns, pointing out that if the stale returns of the baker increases, his margin of profit goes down. The material that can get on the wrap is the material that cuts down sale returns.

Then there is an analysis on 29 of the various resale and wholesale prices of cakes looking at the margin of profit, because it is pointed out that cellophane, being the highest cost material by far,

can only hope to sell at the beginning, at least, in those parts of the industry where the margin of profit of the packager is large so that he can absorb the additional cost.

On Page 30 that point is developed. It states that, "The present set-up box, glassine wrapping costs run from five per cent to ten per cent. Labor about two per cent."

In analyzing those factors it says, "It is usually not possible to use cellophane on cakes selling at less than twenty-five cents at a profit as the increased cost is more than the added net profit."

7248 In other words, where the low margin on the goods exists they can't take cellophane because it costs so much that it will eliminate the baker's profit.

Then there is a detailed analysis, your Honor, and this I wish you would turn to, of wrapping costs at Page 32, and an analysis is made in here and the pages that follow, which I will summarize, of the relative cost of waxed glassine which is the leading competitive material.

As this report shows cellophane on cake, it is done from those seven different points of view that are listed on Page 32; their present cost and a whole group of suggested ways of making a new package which might reduce the cost and seeing if they can't find somewhere where cellophane can get into this business against waxed glassine.

They took it from the point of view of loaf cake, butter cake, butter cream cake, pastry and the luncheon cake. Take a look at the present cost. You will see that the present cost of glassine is $12.36 per thousand cakes. Right below another one, $12.36 on the loaf cake. If cellophane were used, $26.32 a thousand, and then all these different combinations are run and the lowest they can get the cellophane down to is $13.66; still with a much different reduced package, still different and above the cost of waxed glassine.

7249 Comparison on butter creams is $6.70 per thousand on glassine with cellophane running $18.88 a thousand.

On the luncheon layer Round it runs $12.68 for waxed glassine against $28.26 for cellophane.

On the Tarty Bars it is $12.96 against $29.14; and there is no situation under all these various alternatives that are explored where the cost of cellophane as of this time can be brought down to a point where it can compete with waxed glassine. No matter how they figure it, reducing or changing or fixing the package to reduce the wrapping cost, they can't get cellophane on it as cheap as waxed glassine; and here the evidence already shows that glassine in 1931 and 1932 was making big inroads. The Government's evidence shows it was making big inroads because of price, and there is small wonder; and if you wish to see the——

Mr. MINICUS. The Government evidence does not show that, your Honor. I would like him to make an explanation of what he means by inroads. Does he mean that glassine was going in and taking business away from cellophane or vice versa?

Mr. MINICUS. Exhibit 440 contains the evidence.

If you will turn to page 36 you will see in the last paragraph a summary of the situation, your Honor:

"In analyzing these figures it is easy to see that there will be an increase in wrapping cost if 'Cellophane' is to merely
7250 replace glassine. The present net profit is in most instances not so much as the added cost. We will also note the most logical thing to do is to eliminate some unnecessary expense. In most instances, careful measurement will allow a smaller sheet without decreasing the wrapping efficiency."

Now we go on. The glassine people at this time are busy in the trade as shown by Exhibit 37 advertising their material, advertising that it keeps it clean and fresh and attractive, and making a point in their advertising, your Honor, of the profit thing, of the very profit point which is shown by Du Pont's own studies. They are taking advantage of the price in their advertising.

Mr. MINICUS. Isn't that a representation in the ads? Isn't he presenting to this Court what that advertisement says as the proof of the statement?

Mr. GESELL. No, I am merely saying that they are representing this as a point——

The COURT. For the purpose of the record where Mr. Gesell referred to Exhibit 17 make it 19.

Mr. GESELL. Excuse me. Thank you, your Honor. Exhibit 19.

Mr. MINICUS. I want to move——

Mr. GESELL. I am getting tired of these interruptions, your Honor.

Mr. MINICUS. I am sorry I am interrupting Mr.
7251 Gesell, but I find his evidence is entirely inadmissible in my opinion, your Honor. I do ask for the opportunity to present my interpretation to the Court, and I think if the Reporter will read that last statement of Mr. Gesell's concerning this advertisement you will see that the statement has been offered to the Court for what it says and for no other reason than it is pure hearsay evidence.

The COURT. The impression it had on me was that Riegl's glassine was advertising in which they made certain statements; that is all.

Mr. MINICUS. And the statements were put into the record that they were making, your Honor.

Mr. GESELL. They are in the record. They are Exhibit 19.

Mr. MINICUS. Why should those statements be in this record if they are not verified? If Riegel wants to testify to that——

The COURT. It seems to me that Defendant's Exhibit 19 offered in evidence under the theory as stated by Mr. Gesell must of necessity be read together with Defendant's Exhibit 18 in order to show the statements in Defendant's Exhibit 18 had some basis in fact themselves. At least they are corroborative by showing that the glassine manufacturers were advertising in which they were making various statements. I understood that was the offer of proof.

7252 Mr. GESELL. That is all. I think the statement I made was that they were taking advantage in their advertising of the profit point.

Mr. MINICUS. Then why do the statements have to be corroborated if they are——

The COURT. Because Mr. Gesell as an advocate should be allowed to select his own technique to try the case.

Mr. MINICUS. Through hearsay evidence?

The COURT. I don't think it was hearsay. Objection overruled. Proceed.

Mr. GESELL. Exhibit 20, your Honor, comes along in 1931. Here is a packaging machine ad. This is a little different. But it is of interest because you will see this packager, and he has pictures of his machine there, advertise that he has a machine that can run on doughnuts, iced cakes, cup cakes, and cookies with glassine, cellophane, or waxed paper.

In 1931 Riegelite transparent moisture-proof wrapping it is advertising is busy in the market, listing the customers it has, holding them out, seeking the business, talking about the advantages of its product. Your Honor's attention is particularly directed to the text on the left under the picture.

The COURT. It is not a typical representation of a Board of Directors.

7253 Mr. GESELL. None I have ever seen, your Honor.

Exhibit 22, Riegelite, in another advertisement in the cake field.

I want to point out, your Honor, that practically all in this group are ads taken from Bakers Weekly, a recognized trade publication in this field that reaches this particular trade.

In Exhibit 23 we have that interview report, and then in 24 we pick up a group of trade reports which I want to go through in showing the competition in the business.

Now, here, your Honor, we will take this a little slowly, if I may. Here is a report. The salesman's name is Graves and he has been calling on the Schaible Bakery, and he has done it in 1931. You can see the date of his call. It is just interesting to

note as you go down that that is a Sylvania customer he is calling on. Then he reports that they blame Cellophane for a falling of cake business due to odor, and then he develops what the interview was about. He says that he has talked to these people in the bakery and they have been losing business because either in the case of cellophane or Nymphwrap, a Sylvania product, this odor is being created on cakes and cookies. We will have more about that in the technical phases. That was one of the difficulties of cellophane. It was so lacking in porousness that it built up unpleasant odors in the early days. He said they soon
7254 expect to go back to the use of wax paper.

"I asked them if they were sure that it was the fault of the Cellophane. They said it was. I shall continue to show cake samples and the minute their sales do not show up well in wax paper try to get them back on Cellophane."

If that is not a concrete example of competition with wax paper I don't know how you can prove it.

Mr. MINICUS. When Mr. Gesell referred to "they" in that exhibit may I ask who they are?

Mr. GESELL. Mr. Fritz, the buyer of Schaible's Bakery in the city of Easton, Pennsylvania on 10/16/31 in the presence of Mr. Schaible, the head of the bakery.

Mr. MINICUS. I submit, your Honor, that all those people are within the jurisdiction of this Court and subject to subpoena, and if they have something to say in this case they should be here on the witness stand subject to cross-examination. The Government has no chance to cross-examine any of these "theys" that Mr. Gesell is quoting at so much length.

The COURT. Let us pause a minute, Mr. Minicus. Here is a document which is offered to me and I as a judge have to test its probative value. The first question I ask myself is Could it be in 1931 some salesmen in the Du Pont Company were going out to manufacture statements because they were going to be used
7255 twenty years later in an anti-trust suit by the Government?

That would be fantastic. I look at this document for its probative value. Do you challenge its probative value?

Mr. MINICUS. I certainly do, your Honor.

The COURT. Objection overruled.

Mr. MINICUS. May I answer your question, sir?

The COURT. No, sir. I withdraw my question.

Mr. GESELL. The next one, your Honor, is No. 25 on page 44 dated in 1932. Here is another call to another baking company. They are buying converted goods from Brooks & Miltrint. Their business is biscuits, wafers, crackers, sweet doughs and specialty breads.

Now let us direct attention, if we may, to 6 (b) of that report on page 44. You see those numbers tied into subnumbers on the form of report under the words "Creative Work Done," and 6 is creative suggestions to extend use of cellophane. Here the suggestion is the use of second class stock on special breads and sweet dough items, of course, carried at a lower price. He pointed out that other bakers were doing that and you notice he stresses the sales reasons. Then what is the response from these buyers? "Claims to be very much interested in application of Cellophane, admits all merchandising advantages, but claims cost too high and that Cellophane wrapping would not fit in with their present production schedule. Claims that machinery men have told
7256 him it is impossible to obtain satisfactory tight seal. Upon my refutation of these objections he frankly admitted their hesitancy was due exclusively to increased cost over waxed glassine."

Here is cellophane with a customer who is buying some, trying to get more business, and is meeting the competition of waxed glassine which is winning out, and what does he want to do? His program is to get them started on one item, the sweet dough items, and then see if we can't build it up.

Then in 26 we have another one in which there is a report of the A & P, and A & P is discontinuing wrapping cakes in cellophane at Louisville because the Manager says the sales are just as good in glassine, and he is hoping to see if he can't get cellophane on pies and get it back on doughnuts, and they have lost the doughnut business because A & P switched to Riegelite. Is that competition in the market? It seems to me clearly that here are waxed paper and glassine displacing cellophane and cellophane seeking to get on, and a shifting back and forth of business. Here is a pretty big account, A & P.

Exhibit 27, and this one, your Honor, I would like to emphasize a moment. This is the Royal Baking Company, and he takes up with these people the fact that they have taken cellophane off the low-priced items, and what response does he get from the buyer?
That the price situation compels him to cut costs or go out
7257 of business. He will go back on five-cent items when the price situation permits him to make a profit, continuing cellophane on the larger cakes. But in the low-priced items where presumably his margin of profit is small he has thrown cellophane off because it costs too much. "Lower priced cakes," it says, "have been put in Riegelite" down under 5.

In No. 7 the man is contending that he must use Riegelite or raise the price of his product. Here is cellophane on higher-priced goods and the baker can't absorb it on his product, and Riegelite, which is cheaper, wins out.

The next one is a trade report from another bakery in 1932 where at the bottom of the page, there under 9, it shows that this baker is using glassine and cellophane but at a ratio of 5 in glassine to 1 in cellophane.

Here is another baker—incidentally, it is a Sylvania account for 2,000 and for Du Pont for only 500. We are calling on them and they report in 7 that they are using glassine on their cake unit and they won't change to cellophane. They say it is going very well in glassine.

Here comes No. 30 next, page 49, one of the sales bulletins, and here we announce to our salesmen in 1933 the results of work that has been done in developing with the American Machine & Foundry Company a uniform basis so that wrapping machines can be converted to handle moisture-proof cellophane, and we tell
7258 our salesmen about it and say, "Go out and tell these people who have these machines and are using them with other materials that they now can convert the machine to use cellophane, too, and see if you can't get more cellophane in." They point out that the competitor is offering to convert machines free.

Here is another sales bulletin, Exhibit 31 on page 52, discussing how the bread wrapping machines can be converted so that they can use cellophane also, because; obviously, your Honor, these bakeries which had machines in their own plants and were feeding in the material and wrapping their bread had a big investment if they could not run cellophane through that machine, and these were machines built up for wax paper and glassine, the people who were first in this business, and we were working to see if we could not make those machines also handle cellophane, and in 1933 we are making progress and sending it out to the trade in an effort to encourage the use of our product.

In 31 we have the form letter that we were sending out at page 55, which is the form-letter that accompanies this bulletin that I just referred to, and we state to our customers that we are pleased to announce that the experimental work is completed, working with the machinery manufacturer, and that cellophane and wax paper can be used interchangeably if desired on the machines.

Then 32 at page 56, we run for a period of time
7259 into some more of these trade reports. Under 6 you will see that this Cracker & Candy Company was wrapping its English wafers in wax paper and that we urge the use of moisture-proof cellophane. What happened? They said they would consider it—"Only is cost conscious because claims cost five times as much to wrap in cellophane as in wax paper." We are now in 1933. I don't blame them for being cost conscious. We were not able to get that business whatever.

Here is another one in Exhibit 33, page 57. We urged that he use M. S. T., which is a new type of film that we have developed, as his box overwraps instead of wax papers, pointing out all the advantages. "Above is still cost-minded. Claims he pays 8 cents a pound for wax and 58 cents a pound for cellophane, out of line."

Here is the market, your Honor, and here is the competition.

Exhibit 34 is another call on this same fellow at a later date. The report says, among other things, "As for fig newtons he is now putting out in glassine he claims cannot afford Cellophane on these because are retailing as low as 9¢ a lb., and competition on this item will not allow him to raise costs even on Cellophane as he claims this a very competitive item and no money made out of this unit."

We get around to talk to him about candies and he says,

"He claims he is going to put out a few this way and
7260 packing in plant using label and see if grocer will pay added packing costs * * *"

Exhibit 35 at page 59:

"Above admits its appeal and keeping qualities of Cellophane and its advantages over glassine and waxed paper wraps, but claims he cannot see how he can stand these added costs because of retailing his bread at such a low price * * *".

In Exhibit 36 at page 60 we ask him if he wants to take this and take some cellophane and put it on some of his specialty breads. This is another baker. He says he does not see how he can get more for just the cellophane and he keeps on the other material.

Here is a fellow in Exhibit 37, another baker that is using Riegelite for his packaging. He said the salesman tries to tell him, my-gosh, it will detract from the appearance and you ought to spruce up your package. No result. Says the report, "It is a matter of cost, and they say they won't change." Riegelite is one of the glassines, as we have seen from the ads.

On Exhibit 38 at page 62 the next baker says he can't see how the cost situation is such that he can even shift over and use third class stock. We tried to convince him he will get less stale returns without results.

Page 63, another baker says we will use Riegelite because of cost differential.

7261 Here is another one, an interesting one, No. 40, from the Holsum Baking Company, a call made in 1934. The bakery has reported there that the baker "has discontinued cellophane on white bread, competition, with lower price, forced him to give dealers choice of wax or Cellophane at 1½¢ more and the dealers are preferring wax because the differential gives them more profit. I'm inclined to believe that Holsum are pushing the wax on the premise that they make more profit at 10¢ in wax than 10½¢ in Cellophane."

Even where they tried to raise the price of their product to carry the extra cost of the cellophane they find they can't market it, in this field. Wax paper, the big competitor, is on white bread, which is the major item in this field, and we can't get at it.

The next one in Exhibit 41 we are trying to get them to shift from glassine. He says he won't consider it. He said he sales were not hurt at all by using glassine, and he says he is now going to put all pies back in glassine. He tried cellophane, was not satisfied, going back to glassine.

Here is the Wortz Biscuit Company in Exhibit 42 on page 66, and the salesman there presents the heat-sealing cellophane for carton overwraps and argues for its superiority for keeping goods fresh over glassine, and what answer does he get? The cost are way out of line and the bakery won't consider it.

7262 The Court. Before taking up the next exhibit we will take our mid-morning recess of ten minutes.

(At this point a brief recess was taken.)

7263 I am going to continue through these one at a time in this particular section so that you can see the nature of the proof in the sections that come.

We are now at a different kind of document, Number 43 at Page 67. Here is one of the sales service section reports by Mr. Schilly. It is a technical report that runs over to Page 73. These all follow a very uniform format.

At the introduction on Page 68 you see the problem. The Doughnut Corporation of America is using Diaphane—that is a glassine—as a wrap in merchandising their doughnuts. We are moving along in the dates as we go along. This is 1935 now.

They state the reasons why they are doing it. The doughnuts do not get soggy. They allow excessive moisture to dry out. It works very well. It does not cake or sweat on the sugar or anything else. What is the objective? Under objective, "To determine the practicability of, "cellophane of various types in merchandising the doughnuts."

Then comes the procedure and the tests which I won't stop with, except you will see here are a whole group of scientific tests comparing Diaphane and cellophane of various types, sealed and unsealed, as to permeability, as to the condition of the doughnut under different hemispheric conditions with different sugars, all to find out how the situation shapes up in the competition

7264 between the two materials.

Then there is a discussion. The discussion starts at Page 72 and the results of the experiments are reviewed.

Then is the conclusion. This is the conclusion of Mr. Schilly, of the DuPont Sales Service Section in 1935. What does he say?

On Page 73, "L. T. and M. S. T. cellophane are not as suitable as Diaphane for merchandising doughnuts and in keeping them in a satisfactory saleable condition for a seventy-two hour period."

We take the claims of the customer. He says we like some things about your product but it does not meet our requirements of our market. We analyze it and we find he is right.

What do we do about it? Here we have a glassine on the product of a major account and it has better properties. So what do we do about it?

The next item is Exhibit 44. Since our material isn't too good we experiment with different ways of sugaring the doughnut to see if we can persuade the doughnut manufacturers that if they use a different sugar the deficiencies in the properties of cellophane will be eliminated.

And we experiment and develop material in Exhibit 44 which indicates that if you do use a different sugar cellophane is
7265 in a little better position as against the competing wraps, particularly in the humid conditions. The end result of this, we will see, your Honor, is the development of different types of film.

We will skip 45. We did not offer it.

We will come to Exhibit 46 at Page 80. Here is the evaluation of cellophane and waxed paper as a protective wrap on breads, and we go down through a whole series of I. P. V. and P. V. C. tests which are tests to sample the product on permeability when it is folded or crumpled and before and after use in a package. We test odor and we test all the different things and the conclusions appear at Page 83.

It shows that we afford more protection than waxed paper on the bread and if there is a double wrap of waxed paper it does better than cellophane. There it is not properties that are caused trouble but it is cost, price.

Then Exhibit 47 is a very interesting type of report. This is now 1938, Exhibit 47, your Honor. What is this? Here is a complaint. Page 85 shows that.

Here is a complaint from the Ward Baking Company that M. S. T. cellophane is not rendering adequate protection on their cake products during the winter season and it is not comparable in this respect to Riegel Waxed Glassine.

What do we do about it? We again make a series of tests. The conclusion is on Page 87.

Results of test 1 confirm Ward's original statement
7266 that heat sealing cellophane is only half as good as Riegel's glassine in protection to cake products.

Another conclusion on Page 88. "Except for results on cupcakes

waxed glassine still shows a marked superiority," and so the conclusions go with glassine getting the better of it.

Here we have glassine in the cake field shown by these tests to have superior properties and, of course, it is lower priced.

Then let us take the conclusions, and they are summarized for the entire study on Page 94. This is in 1938. "Waxed glassine from the Riegel Paper Company renders better all-around protection on cake products than any type of cellophane now produced."

We only have one film that even approaches it.

Now, what is the final recommendation? "Further work will be conducted to obtain the most satisfactory type of film for this purpose. Following this the existing specifications for this type of trade will be changed to insure maximum protection to the wrapped products."

We have not got anything that meets glassine as to properties. We are going to go out and work and see if we can develop a type of film that from the point of view of these various factors that are required by this type of cake manufacturer and get a kind of film which will suit his needs.

7267 You talk about substitute materials. What is the substitute material if there is any there? It is cellophane seeking to get into this business, seeking to become a more effective competitor against entrenched fellows with better properties and lower prices.

Exhibit 48, a baker product document in 1939, and here there is an evaluation of eight different films from the point of view of cake products. It is a whole series of different tests, different procedures showing the relative give and take between the products under different conditions.

Exhibit 49 is another test relating to cake products, and look at the conclusion on 49. There is a review of the work and here we are back at Mr. Ward in 1939:

"As a result of this work, the du Pont Company has offered to the Ward Baking Company a moistureproof heat-sealing film, known as MST-54, capable of rendering superior protection to their cake products and having excellent wrapping machine performance efficiency."

So a year later after further tests we have developed a particular type of film which makes us an effective competitor with glassine in this important account.

Now, if that is not competition, if that is not give and take on research it is hard to understand what it is. It is a clear example of cellophane seeking to develop a product which will make it competitive in the market.

7268 In Exhibit 50 we have another ad. We are running along to 1939. Riegel's ad. They are emphasizing the cost factor very strongly in their advertising as their main lead.

In 51—we are now over to 1939—they are evaluations of a new film that is coming along called Pliofilm. That is Goodyear's rubber sheeting, it is called here, and the results of these tests show that Goodyear's rubber sheeting is better than M. S. T. at page 115 in terms of a single wall bag.

Fruit cookies in bags of cellophane in Exhibit 52 is another report comparing cellophane with Pliofilm. This is 52 in 1940. Then over in 53, page 125 we have some more sales reports. We are now up to the year 1940. The salesman calls on a bakery in 1940 and what does he find? He learns that the baker has adopted a new type of glassine produced by Newark Parafline and Parchment Company called Mirilite. The Newark Parafline and Parchment Company we see way back in Exhibit 2 as one of the wax and parafline paper manufacturers in this trade as early as 1924, and here in 1940 in Exhibit 53 they are still at the old stand. They developed a new type of glassine and they are getting this man's business. It says that the new glassine has a synthetic rubber coating and is supposed to give greater transparency and better protection, and he further claims and states this finished paper is being vigorously promoted by Newark and Nashua
7269 and several large bakers have adopted it.

So what do the salesmen do on this account in Exhibit 53? He compares their present glassine wrapper with cellophane wrapped product, as it says under 3 here, pointing out the complete visibility, better protection, and so forth. Tried to figure comparative costs. Result, could not budge him a bit. Claims he gets almost as good visibility and protection at much lower cost. What does the salesman do? He says, "Tell me, do you know anything about this new kind of paper and can you send me some tests and yields?" He can't meet the competition is the whole inference of this. 1940.

Here is another one in 1941. This is the Ward Baking Company Exhibit 54 in the year 1941. This shows that Ward is buying heavily from Sylvania and Du Pont in cellophane. We called upon him with respect to his business for soft cakes and other items. We show him a developmental film, and what does the report say?

"Mr. Kleinmann made his usual observation that 'Cellophane' was a costly medium of merchandising for the bread baker stating that the difference in 'Cellophane' purchases vs. wax last year against the yearly earning statement was parallel and that the use of a cheaper wrapping medium would have improved their

statement figures. Mr. Kleinmann's further remarks indicated that they have discussed cellophane within the company in
7270 recent weeks in a search for cheaper packaging."

In Exhibit 55 another call on Ward in 1941, and under the heading "Diaphane", your Honor, appears this:

"In an economy move they have replaced 'Cellophane' with diaphane on 15¢ tea rings. Mr. Kleinmann made the statement that they were losing money consistently and one of their high costs is 'Cellophane'."

He says, "Mr. Kleinmann non-committal on whether they planned further use of diaphane on cake and bread items."

There we have lost business.

The next is a sales bulletin, Exhibit No. 56 in 1941 relating to the variety bread situation in which we report as follows in the first two or three paragraphs:

"It has been growing increasingly apparent that certain important organizations are promoting the discontinuance of 'Cellophane' on variety loaves—for reasons well known to all of you. It is possible they will give two reasons for this move:

1. Rising ingredient costs, plus the Government pressure against increasing selling prices further, has made it necessary to cut costs wherever possible.

2. Government pressure toward elimination of stales might lead to the elimination of consignment selling.

"This was the situation in one of our important midwestern markets. All of the largest bakers had gone out of
7271 'Cellophane' on whole wheat, cracked wheat and rye. Stale returns immediately rose and it was evident there was considerable uncertainty as to the wisdom of the move.

There we have a report of competition that was being met in that important field and suggestions to the sales force as to what they should do to combat it.

Mr. MINICUS. I wish Mr. Gesell would read the next paragraph of that.

Mr. GESELL. In 57-A at page——

The COURT. Mr. Minicus wants you to read another portion.

Mr. GESELL. Of what exhibit?

The COURT. 56.

Mr. MINICUS. 56, where you discontinued reading. I would like to hear the next paragraph in the record.

Mr. GESELL. "The situation was handled by our men with these accounts with the idea of increasing this uncertainty," i. e., that if they shifted to cellophane, their sales return would rise. I should have thought that was the proper thing for the salesmen to do.

Mr. MINICUS. The paragraph has four sub-headings, Mr. Gesell.

Mr. GESELL. In 57-A——

Mr. MINICUS. We still haven't had the paragraph, your Honor.

7272 Mr. GESELL. Your Honor, I am not going to read for him. He can read when he comes to that exhibit. I have not even read it myself. Am I to be put to reading exhibits to your Honor by the Government?

The COURT. Refresh my recollection. We had the same situation when the Government presented its case, and there were certain portions you wanted read.

Mr. GESELL. Where they read documents.

The COURT. Did you read them or he?

Mr. GESELL. In most cases he read them when I requested it. That is my recollection. But that was on a presentation where he read the text of the document. I am not reading texts of documents here. I am selecting bits and summarizing. I read a portion——

The COURT. In order that we may have the proper emphasis, will you read it into the record, Mr. Minicus?

Mr. MINICUS. Certainly, sir.

"1. The bakers' basic job is to operate profitably whether they use wax or 'Cellophane'.

"2. 35% to 40% of their business (variety loaves) had been built up on 'Cellophane', because the consumer wanted it.

"3. The growth of variety sales had been established principally by visibility.

"4. Without visibility the baker must face other
7273 sources of competition in this variety market."

Thank you, sir.

Mr. GESELL. I think he should have, since he tried to read it, read the beginning of the sentence, "These points were stressed:" That is a statement of the sales argument.

57-A, at page 135, is a memorandum which analyzes the different developments that are taking place in the improvement of various papers that are competing with cellophane, such as bread wrappers. You will see there—and this is the year 1945—the development of the improvements in sulphite, in glassine, in lacquer-coated glassine, and then it says, "Without question, the paper people recognize the growing threat of Cellophane and are working hard to improve their product, particularly in the direction of transparency." They have got us on costs and they have got us on many of these other properties and they are moving towards transparency.

At the end of the document it says, "I understand Riegel Paper Company and Marathon are particularly active in this direction.

Also suggest you consult with Fabrics & Finish, who are supplying coating lacquers for this purpose."

So is a trade report

Mr. Roach. We have an objection to this one, your Honor, because this is a post complaint document. This is the first of a series of post complaint documents to be offered
7274 in evidence, and this is in line with your Honor's decision when you allowed amendment to the answer and decided that we would take up these as each one of them was offered.

This particular document is a report of what the Holsum Bakers of Tampa, Florida, is using to wrap raisin bread in in 1948. I cannot see what the materiality of Holsum's raisin bread wrapped in 1948 has to do with the Government's charge of a monopoly prior to December of '47.

There is a great volume of documents to be introduced by the defendant, your Honor, all subsequent to the filing of the complaint.

Mr. Gesell. That is not the fact. There are 217 that are post-complaint out of 978.

Mr. Roach. That is quite a volume, 217.

The Court. Let's discuss it through.

What is the purpose of this offer and upon which ground do you claim it is admissible, Mr. Gesell?

Mr. Gesell. I claim it is admissible in support of the issues tendered by the complaint and answer as to whether competition exists and has continued to exist in this field. The complaint alleges that competition has been prevented, and if the relief sought it is not obtained, competition will not arise, that there is no competition. We say that the competition existed in the past and has continued, and that the judgment as to whether or
7275 not certain acts and transactions involved in this case are to be said to have tended toward a monopoly; you have to judge what the effect and result was of the acts that are criticized, and that in support of our broad assertions as to the proof here, we should be permitted by way of these illustrations to bring this story right along up to date.

The Court. Now, Mr. Roach.

Mr. Roach. Your Honor, even Mr. Gesell could not keep out the question of relief in his argument, and that is our whole point. As we have said before, we have an order for a separate hearing on relief, and that is the time we will test what the prevailing conditions are in the market.

Now, the Heller Associates have compiled a great many charts, your Honor, using the year 1949 as a basis for what the converters did, what end use they made of this cellophane, and the end use of various other products.

Now they are going to use 1949, as far as we can see, as a basis for their argument that there was not a monopoly prior to December, 1947.

Now, if there is any materiality to this kind of evidence, it would be in the relief, your Honor.

Mr. GESELL. Well, that is going back over all the ground that I thought we had entirely cleared up on the close of their case, that we would be permitted on our case to offer evidence in support of the allegations in our answer.

7276 The COURT. With the reservation to them to attack it on rebuttal.

Mr. ROACH. That is right, your Honor.

Mr. GESELL. That is right. And I though that that was what we had——

Mr. ROACH. I would like to add, too, your Honor, a point that I don't think we took up before, the fact that in these post-complaint documents they evidence acts and events, conditions, which were brought about by the defendant himself. They are not events that occurred through the act of a third party without the cooperation of the defendant. These documents are conditions brought about by the defendant and in many instances stated by the defendant solely for the purpose of clearing themselves of this charge of a monopoly. They have it in their own documents.

The law is clear-cut and settled, your Honor, in the Trans-Missouri case that whenever post-complaint documents are offered, especially post-complaint documents that show a condition which the defendant himself brought about, they are not admissible in evidence.

We also rely at this point on our brief filed March 30 in support of this contention.

Mr. GESELL. Are we to have a renewal of all those arguments, your Honor.

The COURT. That is what I want understood now.

7277 Mr. ROACH. We would like it cleared up now. We object to all the documents to come.

The COURT. I am going to stand on my former ruling.

Mr. ROACH. Your former ruling says we would take it up—

The COURT. Where is the former ruling recorded?

Mr. ROACH. When your Honor allowed the amended answer and supplemental pleading to come in, you said you would take these matters up—that these matters set forth in the amended answer would be taken up when the evidence comes in.

COURT. What does the record disclose was said with respect to your Paragraph 5 on page 29 of your amended answer, Mr. Gesell? I think that is the paragraph that has our interest at the moment.

Mr. GESELL. At page 3989 of the transcript, you say, "The Court will decide whether the amendment should be allowed and thus determine the issue as to what evidence in connection with this phase of the case will be permitted when the defendant opens its case. There will be a reservation, however, that this ruling insofar as it pertains to the evidence in question will not bind the Government if it has any additional cogent reasons for the exclusion of such evidence."

Now, I assume that what your Honor meant there, in the light of our discussions and conference, that if there
7278 was some clearly self-serving document or some document that for other grounds was inadmissible and it came in the post-complaint period, of course you were not ruling on that. I thought we had the main thing settled.

The COURT. I thought we had passed this situation.

Mr. ROACH. I remember a phrase your Honor used. You said when this evidence is put in you will call the balls and strikes as they come before you.

The COURT. All right, let us call them.

Mr. GESELL. When he says ball or strike, I want to know which one of us you are talking to.

The COURT. If it is to you, Mr. Gesell, it will be a ball; if it is a strike, it is to you, Mr. Roach—and three of them and you are out.

Mr. ROACH. I object to this document, your Honor, on materiality. It does not meet the issues as outlined and as joined in the complaint and answer in Paragraph 21 and 22 of our complaint.

The COURT. Your offer of proof of Defendant's Exhibit 58, as I understand it—and correct me if I am wrong, Mr. Gesell—is to show that this is simply carrying on a course of business which had occurred prior to 1947?

Mr. GESELL. That is right, and the continuation of the competition.

The COURT. Objection overruled. That is one strike,
7279 Mr. Roach.

Mr. ROACH. Rather than come up every time, your Honor, there are an awful lot of these to come in and I will be rising constantly. From now on he has quite a few that are post-complaint. Could we have a continuing objection to those?

The COURT. Very well. Let that be understood.

Mr. GESELL. They are all together here, your Honor. We have arranged it chronologically, so that when we come to the end of these

The COURT. Will you announce, so the record will be clear, that his objection covers DX 58 to DX blank?

Mr. GESELL. DX 73.

The COURT. All right, proceed.

Mr. MINICUS. There is one that does raise a little confusion. There are other sections that start all over again with this post-complaint evidence. Will it be necessary to renew the objection at the beginning of each section?

The COURT. I think for purposes of the record it will help me when I come to read the record—at least, it will act as a caveat when I look at those documents.

Mr. MINICUS. Very good, your Honor.

Mr. GESELL. Defendant's Exhibit 58 is a report of the Holsum Bakers. You remember there were earlier reports that we were calling on them. Here in Exhibit 58 it is reported that all
7280 Tampa bakers had discontinued cellophane ten days ago and they are wrapping in opaque wraps, and they are uncertain how long they will stay out of cellophane.

Exhibit 59 is the Sylvania account that we are calling on, the Bold Baking Corporation. They are sounded out with respect to switching from wax to cellophane. They will switch rolls to cellophane when wax inventory is depleted.

We have in Exhibit 60 another Riegel item ad, showing the continuation of Riegelite. That is the "five out of eight" one that your Honor's attention was called to as a horrendous example.

Exhibit 61 is an item, I believe, relating to cake wrapping machinery and shows that Sylvania was selling heavily on the product.

62 shows improved high gloss printed wax appreciably lower in cost than cellophane. In 62 we emphasize the consumer preferences compared with the other wraps, trying to get them off glassine.

In 63 we have a biscuit company shifting to a wax overwrap. This is now 1949. And the factors governing their shift is the alleged less cost, the successful experience of other members in the group, and Kendall, the man they call on, believes that cellophane is superior from a functional and merchandising point of view, although admitting that wax paper converters have improved both the finish and clarity of reproduction, but he is using the other material because of cost.

7281 In Exhibit 64, the Ontario Biscuit Company, competition with the wax overwrap on various baked goods, the differences in the price are shown to be 39¢ per thousand and the cost is the big obstacle that we are running in against wax paper competition on that account.

65, Union Biscuit Company, is a glassine account and they are going to study glassine and cellophane to determine which is best from a cost point of view.

66 shows Dave Lee, on a sandwich bread and they have a high

gloss paper manufactured by Kalamazoo that they say has clear properties and they are going to apparently keep it.

Then there is the request for a competitive report analyzing that material in 67.

In 68, we are making a strong bid for some business that Sylvania has established, Purity Biscuit Company, in 1949, and they are having some dissatisfaction with Sylvania film, but they are also using printed wax wraps.

Wax competition is shown in Exhibit 69.

Then, in Exhibit 70, your Honor, we have the first of a number that are going to come along here of a different type of document which I want to pause a minute to discuss. This is Exhibit 70 at page 153.

Mr. RENNINGER. If your Honor please——

Mr. GESELL. I am not going to discuss it. I first
7282 want to talk about this a moment, if I may, and then we will set up any evidentiary problem.

This is an article from "Modern Packaging", October, 1949. It starts at page 153 and it runs over to page 161, and it is objected to, and I assume the Government will want to press the objection, on the grounds of authenticity, hearsay, incompetence, irrelevant, immaterial, self-serving. What it is is an article from this recognized trade journal, "Modern Packaging" analyzing the bakery industry under one of its periodic reports that it sends out to the trade which it says the industry is improving its packaging and overcoming its technical problems, and then it reviews different types of packages, different types of materials, and the conditions that exist as to this packaging use.

7283 Mr. RENNINGER. If your Honor please, we have an objection, as Mr. Gesell noted, to this article. It is satisfactory to us to wait until this group of exhibits that Mr. Gesell has attempted to introduce in evidence before discussing it, if you prefer.

I just wanted to draw this to your attention so that in reading through the exhibit you will understand we have an objection to this.

The COURT. I have made a note of your objection with respect to this particular exhibit.

Mr. GESELL. Your Honor, I believe that this is one of the documents at this time which at some moment in the case the Court should review in its entire text as developing the story in this particular end use.

I am only going to hit a few high spots to show you that it shows the different pictures of different kinds of wraps. It gives you an analysis of what the bakery trade considers to be the important

factors and properties for different packaging materials, and then it reviews different materials, both some of the new ones and the old ones and discusses what uses have been found for them in the trade, what properties they have that are liked by certain bakers and not by others.

On page 159 it discussed bread wrappers and points out the different kinds of competitive materials that are
7284 soliciting that trade. It makes some analysis of the relative costs of materials, on Page 160, as between cellophane and glassine and wax paper, still showing that cellophane is by far the most expensive of these three major wrapping materials in this field.

Mr. MINICUS. There is one thing: It shows the cost of printed cellophane as well. I think that should be taken out as it is confusing. We should just stick to cellophane.

Mr. GESELL. The reason it shows printed is that it is comparing it with printed glassine and printed cellophane, so it seems to me that would have been the proper comparison.

Mr. MINICUS. That is in the converted end of the business. I don't think we should confuse these printed papers in this case. There is no charge that there is a monopolization of converted cellophane.

Mr. GESELL. I am happy to have that concession which I consider the most important concession made to date by the Government.

The COURT. I had no indication heretofore that there would be any concession made.

Mr. GESELL. No. It is a withdrawal of the substantial charges of this complaint, and we are going to hold them to that concession on the proof of this point.

7285 Mr. MINICUS. The Government has not conceded anything in this case and there has not been any concession.

The thing here is that DuPont sells cellophane and somebody else prints it. We are charging DuPont with a monopolization of purchasing cellophane. We want it clear that the price of printed cellophane and the transaction by which cellophane is sold from a converter to a user are not part of this case.

The level which we say the monopoly exists, concession if it be, is in the transaction out of the DuPont Company to every buyer. What price the converters may get for the printed cellophane is none of our business at all. We are sticking entirely to cellophane sold by the DuPont Company on the market in which cellophane is sold as such and not the markets in which converted cellophane is sold at all.

Mr. GESELL. In other words, we are now saying that there is not even a cellophane market. The monopoly they are charging

is a limited cellophane market, the sale to the converters, not the sale of the cellophane to the people who use it.

Mr. MINICUS. The converted cellophane is not the cellophane described in this complaint any more than an aluminum pot is virgin aluminum.

7286 Mr. GESELL. The cellophane described in this complaint is converted cellophane, because this complaint says that cellophane is so that the wrapping material for use in foodstuffs and consumers goods and the wrapping material that the people buy is the printed cellophane that comes to the converter.

The COURT. It seems to me that the record has been sufficiently established at this point on which you can both address your legal argument.

Mr. GESELL. I think it is clear there is no concession when you pin them down.

In Exhibits 71, 72 and 73 we run through a few more sample competitive reports showing in 1949 and 1950 the continuation of this competition in primarily glassine, waxed paper and cellophane in the baker market with some indication of the appearance of certain new films.

The COURT. We will recess until 2:15.

(At this point recess was taken until 2:15 o'clock, P. M., the same day.)

7287 2:15 O'CLOCK, P. M., THE SAME DAY.

Present: As before noted.

Mr. GESELL. Just by way of a very brief summary of this section, your Honor, we believe these illustrative documents show that glassine and wax paper were well established in the field and still have a very strong position.

That from the very beginning, and still today, cellophane has been sold in competition with the material at a price disadvantage; that the development of moisture-proof cellophane and the improvements in the quality of cellophane did much to bring about some of the fatal physical deficiencies that cellophane encountered, and that there has been intensive research competition in the field between the different materials; that sales have improved for want of competing materials when quality has improved; that reductions of price have been beneficial in improving sales and that cellophane had made headway in the field based on its quality improvements, on its developmental selling and on its price reductions, and I think it is aptly clear that DuPont does not control any of these customers or any segment of this market. The individual buyer is strong, resourceful and he has numerous

7288 alternatives and he makes the choice.

Mr. RENNINGER. If your Honor please, the Government reserves any discretion of the defendant's documents placed in

evidence this morning until a later date when the issues are a little more crystallized.

At this time I would like to take up the Government's objections to various of the defendant's documents. They fall into two classifications. The first is the Government objections to these various so-called salesmens trade reports.

The Government objects to the admissibility into evidence of all these various trade reports, not only in this section but in the sections to follow on the ground that they are not only hearsay but in most instances they are hearsay upon hearsay.

As we have seen, these trade reports are written by the various DuPont salesmen in the field in which it is reported the various calls made by the salesmen upon various customers. These reports discuss various trade gossip and in the event that the salesman is unable to make a sale they are given in the reports the salesman's excuses for not being able to sell the DuPont product.

All these salesmens reports are replete with these various hearsay statements—what various people in the trade told the salesmen
or what third parties may have told the customers and the
7289 customers may have told the salesmen; rumors in the trade
which the customer tells to the DuPont salesmen and which he adds onto his home reports.

In every instance there is no truth to the matters alleged in these reports and there is no right of cross-examination allowed to the Government. Even though, as your Honor has stated, the salesmen may not have been writing these reports with the thought that they may be used in an anti-trust case twenty years later.

In reports of this type one must also take into consideration the natural failings of human beings; their attempts to justify their own individual deficiencies and their attempts to justify their actions to their superiors as to why they could or could not make a sale.

In the first place, it is highly questionable as to whether these reports can be considered as records made in the regular course of business and coming within Title 28 U. S. C. Section 172.

The COURT. Do you think the defendant would have gone to all the trouble of making tests, various analyses and devoting their technical and engineering abilities to probe this matter deeply if the reports that came in were casual salesmen's excuses for not making sales? We must be realistic about it. Do you think a big corporation would act that way?

Mr. RENNINGER. Of course, a big corporation not
7290 only relies to a certain extent upon salesmen's reports.
They also rely or they are interested in various new products that may come into the field. That is admitted.

The COURT. If I were to accept your view—let me take for example Defendant's Exhibit 36, the Dietzens Bakery of Anderson, Indiana. Do you mean before I can consider these writings you would have to get Mr. Dietzen, the President, or any of the persons directly under him in the former management and bring them here for extended direct and cross-examination? Why, we would not be finished before the millenium.

We have to approach these anti-trust cases in a realistic, practical sense. If we look at a document and say, well, that is what meets the old master's statement: Does it meet the substantial guarantee of trust workings? It seems to me I am only interested in that.

Mr. RENNINGER. I would like to point out that with reference to Defendant's Exhibit 26 that this is just one trade report from this company. We don't know what happened. It is only part of the story. If they can take these isolated, little instances, and the same applies to most of these trade reports all through this, they involve in most instances one trade report on one company. What does that show? We don't know what happened. It is only part of the story.

The COURT. At best what you are saying to me is that
7291 I should look at this particular evidence very carefully and scrutinize it as to whether it has any evidentiary value at all. It seems to me that is the whole point of your argument.

Mr. RENNINGER. Yes.

The COURT. Except, I suppose, you go beyond that and even challenge the very admissibility of it, but I overrule that.

Mr. RENNINGER. As Judge Wyzanski stated in United States v. United Shoe Machinery Corporation, that various business records are of much higher probative value than these here. He stated that certain ones were admissible for certain purposes, but that in no event were they admissible for the truth of the matters contained therein.

Another consideration, too, your Honor, is that the defendant here is attempting to put these documents into evidence himself. This is an entirely different situation from a case in which the Government is attempting to put such types of documents into the evidence for the purpose of showing knowledge on the part of defendant or for the purpose of recording admissions made by the defendant, as in the United Shoe Machinery case.

As you well know, the reason for relaxing the hearsay rule and depriving a party of its right of cross-examination is based prin-
cipally upon the reason that documents taken from a de-
7292 fendant's files and used by the plaintiff are documents of which the defendant has full knowledge and is not deprived of a right of cross-examination since he cannot cross-examine himself.

I would like to call your Honor's attention to Wigmore on evidence, Section 1048: "But, regarded from the point of view of the legal rules of admissibility, the party's extra-judicial statements, like other extrajudicial statements, are met and challenged by the Hearsay Rule. How is it, then, since they are nevertheless admissible against the party-opponent that they are able to pass the gauntlet of the Hearsay Rule?

"Very simply. The answer is that the party's testimonial utterances do not pass the gauntlet of the Hearsay rule when they are offered for him unless they can satisfy some exception to that rule; but that they do pass the gauntlet when they are offered against him as opponent, because he himself is in that case the only one to invoke the Hearsay Rule and because he does not need to cross-examine himself.

"The theory of the Hearsay Rule is that an extrajudicial assertion is excluded unless there has been sufficient opportunity to test the grounds of assertion and the credit of the witness, by cross-examination by the party against whom it is offered: that is, if
Jones had said out of court, 'the party-opponent Smith bor-
7293 rowed this fifty dollars,' Smith is entitled to cross-examine
Jones upon that assertion. But if it is Smith himself who said out of court, 'I borrowed this fifty dollars,' certainly Smith cannot complain of lack of opportunity to cross-examine himself before his assertion is admitted against him. Such a request would be absurd. Hence, the objection of the Hearsay Rule falls away, because the very basis of the rule is lacking, viz. The need and prudence of affording an opportunity of cross-examination."

We have an entirely different situation here, your Honor. The defendant is attempting to use these documents on its own behalf, documents of which the Government has little or no background knowledge, and if these documents would be admitted the Government would be deprived of its right of cross-examination. There is no proof as to the truth of the statements contained in any of these documents.

The background history of the admissibility of business records is fully discussed in a Delaware decision, Watts v. Delaware Coach Company, in the Superior Court of Delaware, 1948, 58 Atlantic 2d, 689.

Judge Layton, in that case, discussed various leading cases on the subject, recognizing the various exceptions to the Hearsay Rule.

The Court in that case went on to discuss the New York Life
Insurance Company v. Taylor, 79 United States Appeal,
7294 D. C. 66, 147 Federal 2d, 297 at Page 303, and in that case
various medical records of Walter Reed Hospital were

offered as evidence of the deceased's suicidal frame of mind. The Court stated:

"The diagnosis of a psychoneurotic state involves conjecture and opinion. It must, therefore, be subjected to the same safeguard of cross-examination of the physician who makes it. And accounts of selected items from interviews with patients must be subject to the same safeguard."

A little later the Court stated:

"But the excerpts from the patient's conversation reported by a nurse," it was reported by a nurse in her report which was kept in the patient's file, "excerpts from the patient's conversation reported by a nurse are no different from a newspaper reporter's account of an interview. They are made in the regular course of business in the colloquial sense but not as that term was intended for use by statute." The consequence of the position taken by Judge Edgerton would be that the mere absence of an apparent motive to misrepresent makes admissible any and all business records which are regularly kept regardless of their character. This, we believe, is a legislative change in the Shop Book Rule which is not permitted by the statute."

This is the situation we have in our trade reports, your Honor.

These salesmen's trade reports are naturally biased. They
7295 are written with a view in mind of personal advancement.

They are replete with hearsay and hearsay upon hearsay in opinion evidence. In these salesmen's reports we do not have a recording of statistics or of routine matters directly incident to the operation of the company, nor are they a simple recording of certain established facts relating to the operation of the company.

It is interesting to note that the DuPont officials themselves, in Defendant's proposed Exhibit 924, state that they cannot rely upon their salesmen's estimates of Celon's business sales. The report states that, "The condition is disturbing," as, "it indicates very definitely that our men are not close enough to our competitive accounts to get the actual information."

Mr. RENNINGER. Shall I take up the other objections now?

The COURT. Are they with reference to this?

Mr. RENNINGER. No, it has to do with these articles appearing in various trade publications.

The COURT. That falls within this first category of Exhibits 1 to 73, inclusive?

Mr. RENNINGER. Yes, sir.

The COURT. Proceed.

Mr. RENNINGER. The only exhibit so far admitted or offered into evidence by the defendant relating to articles appearing in
7296 trade periodicals is found in Defendant's Exhibit No. 70. There are many more to come, however.

The Government objects to the introduction into evidence of this and the various other articles that will follow appearing in these various magazines and so called trade periodicals on the grounds of hearsay, incompetency, immateriality and authenticity. As I pointed out in my discussion as to the salesman trade reports, the distinction here must also be drawn as to the difference between documents of the defendant offered by the plaintiff and documents of the defendant offered by the defendant itself.

Mr. GESELL. Mr. Renninger, may I interpose a moment?

Your Honor may wish to see in this case the actual article in the publication to get some impression that you can't get from the photostat. I would like to hand it up.

The COURT. The answer to the question I am about to ask, if anyone present can answer it, should not be given any consideration by me in the ultimate decision of this case, but I would like to know who would be the owners or publishers of such a periodical as Modern Packaging from which Defendant's Exhibit 70 has come?

Mr. GESELL. Well, Modern Packaging, your Honor, is published by the Breskin Publishing Company, 122 E. 42nd Street, New York City. It is a monthly and subscribed for at $5 a year. It is devoted to new developments in packaging
7297 materials and methods and equipment treatment from both the technical and non-technical point of view. The Department of Commerce in the United States Department of Commerce Market Research Source Directory holds out Modern Packaging as one of the recognized sources from which researchers in the field of marketing may obtain data upon which to rely.

The COURT. That was the background I desired.

Mr. RENNINGER. May I ask Mr. Gesell one out of how many on which people may rely?

Mr. GESELL. One out of thousands. Of course, thousands for the whole field of marketing survey, not thousands for packaging.

Mr. RENNINGER. Your Honor, I was saying here again the very important distinction must be drawn as to the difference between documents of the defendant offered by the plaintiff and documents of the defendant offered by the defendant, and accordingly the cases holding that newspapers or magazines may be received in evidence to show knowledge on the part of the defendant as in Loewe vs. Lawler, 235 U. S. at 522 at page 536, or to show admissions of statements against interest are not relevant in the discussion here.

In Defendant's Exhibit No. 70 there is no indication as to who is the author of the article. We don't know whether he is an expert in the field or not. We don't have the right of

cross-examination. The article appears to be made up
7298 of statements of various concerns concerning their claims as to the value of each one's respective product. You will note at the end of the article credit is given to various concerns, and the inference there is that apparently the credit was given for statements in the article as to the claims of the particular concerns as to the relative merits of the particular products.

Mr. GESELL. No, those are credits to the photographers. They used people's photographs.

Mr. RENNINGER. "Special acknowledgment to Gordon Cartons, Inc., Baltimore, Maryland, Willhauer Paper Box Co., Spartanburg, South Carolina, Western Waxed Paper Company, Los Angeles, for information on coatings," and so forth.

As I was saying, we have no knowledge as to what standing, if any, the author has in the packaging field. We have no right of cross-examination, no data or source material is given. There is no proof of anything said, and in such an instance, your Honor, we feel that cross-examination is of particular importance.

The COURT. Point out three examples in this article which you think should be challenged.

Mr. RENNINGER. Well, your Honor, on page 155 at the end of the first paragraph on the right-hand side one of the suppliers who exhibited a new type wrapper at the bakery show says,

"We don't make a practice of going overboard about new
7299 papers, but if we were inclined to do so we would hit the water with a mighty big splash at this time."

The COURT. How is that going to help me to decide this case for or against you?

Mr. RENNINGER. Frankly, I say that is entirely irrelevant and immaterial.

The COURT. Don't you think I would so consider it when I read it?

Mr. RENNINGER. Yes, your Honor, I do.

The COURT. In short, my approach is I want to leave the technical grounds of the law of evidence and I want to get down to the facts of this case.

Mr. RENNINGER. We have a statement on page 160 that "According to sources in the baking trade, prices based on 120-roll (approximately 5,000 pounds) quantities, figuring a yield of sheets 15 by 18 inches, compare roughly as follows:" and then they give certain price quotations there. There are various other instances where they talk about price of one product being higher or lower than another product. A very broad statement is contained on page 159 where it is stated in the first paragraph, "Waxed paper is still the backbone of packaging for white breads, the major volume item of the industry. It is the least expensive

and provides an excellent surface for color printing and eye-appealing design, so imperative for this highly competitive field."

7300 I think that is definitely——

The Court. Will you make a series of proffers of proof to me that that statement is absolutely not based on fact?

Mr. Renninger. No. The problem is, your Honor——

The Court. Why should I waste my hours and my days on things like that? I want the facts. Isn't it the fact that waxed paper was still the backbone of the packaging industry at that time or will you make a sincere statement to the effect, without it being in evidence, that you do not believe that.

Mr. Renninger. No, I don't, your Honor.

The Court. If you don't think that that statement is erroneous why all this objection to it?

Mr. Minicus. If I may offer a suggestion, I think it is largely a matter of interpretation we are talking about here, your Honor. He says white breads. What are white breads? The breads that the Court and myself are familiar with may be the 19¢ loaf of Wonder Bread or Tip-Top, whatever it is. We would like to bring out, perhaps on cross-examination, that there are two types of breads; there are these specialty breads, these variety breads, where waxed paper may not be——

The Court. The first live witness that gets on the stand you can ask the gentleman or lady Do you know anything
7301 about white breads? Then utilize this documentary proof to break it down and show that it has no relevancy, that I ought to give it little if any probative value. But there are methods of doing that instead of bringing the author of this article here.

When was this published, Mr. Gesell?

Mr. Gesell. This one in 1949.

The Court. And going down into the minutiae of each of these written publications and subjecting the authors to cross-examination on the basic material. I would be here all year.

Mr. Minicus. But in this case the Government has no knowledge of this author at all. He might even be representing somebody. We don't know how these trade papers operate.

The Court. Have you finished, Mr. Renninger?

Mr. Renninger. No, your Honor. I would like to continue, if I may.

The Court. Yes.

Mr. Renninger. Pointing out again the various few exceptions to the hearsay rule upon which something of this nature must perforce fall, Wigmore states in Section 1702:

"In a very narrow and usually well defined class of cases, recognition has been given, by way of exception to the Hearsay rule, to certain commercial and professional lists, registers, and reports."

7302 We don't have such a situation in this case here, and even if we did it should be emphasized that in every instance before a document is offered in evidence as an exception to the hearsay rule on the ground it is a learned treatise or commercial report, the foundation must be properly laid. This means that an author of a learned treatise must be shown beforehand to be properly qualified to make the statement on the subject at hand.

I refer your Honor to Harris vs. United States, 18 Fed. 2d 771, where a Secretary's Guide was excluded because it has not been properly authenticated.

The usual type of reports admitted under the Hearsay rule are those involving standard price lists or market quotations. They are taken from a publication in the field noted for its veracity and acceptance in the trade, such as the annual reports of the American Trucking Association, where they allowed in the speeds of various horses, or Reach's Baseball Guide, or certain mortality tables, almanacs, or something of that sort. Here we have an article or a document by an individual expressing his or her personal views and opinion. It does not contain facts. It contains various broad statements. There is no question, of course, your Honor, that this would have to come in under an exception to the Hearsay rule, and, as I have pointed out, I feel that the cases involving the admissibility of documents of this sort

7303 are based upon entirely different types of documents, documents that are well authenticated, documents that are noted for their veracity, documents that contain facts or tables or charts, that are relied upon in the field, and not documents of this sort that contain various opinion statements and argumentative statements and various tables or charts in which the source of the material is not shown, nor where the information is obtained.

The COURT. Do you have any comments?

Mr. GESELL. If your Honor wishes to hear me.

Here is an article, your Honor, that comes from a publication, a trade publication, which the evidence will show was relied on in the trade and which the Department of Commerce holds out in this publication as a market research source which will serve as a reference guide to those engaged in marketing and market analyses. We have got here a very real problem, not as to this exhibit, but as to this method of proof. We are anxious to develop for the Court the facts as to this market, and one of the most

logical and obvious places to look is in the literature of that market. What do the buyers and sellers say about it in reliable publications? As I understand the law, your Honor could go out and read this article even if it were not offered as an exhibit and make findings relying on it.

The COURT. I would not be likely to.

7304 Mr. GESELL. Well, I think you probably would not be because of the volume of material, but your Honor is entitled to do that and the courts have repeatedly held that research by judges into matters that official notice can be taken of, including trade journals, is an appropriate way of looking into underlying economic facts. Judge Wizanski did it not so long ago and was upheld, even though he did it in the face of substantial evidence to the contrary which was offered in the case.

The COURT. You have convinced me, Mr. Gesell. I don't want to hear any more. I will now make my ruling.

Paragraph 1: Plaintiff's objections to the salesmen's trade reports offered by defendant are overruled.

Paragraph 2: Likewise Plaintiff's objections to Defendant's Exhibit 70 are overruled. I am not stating at this time what weight or credibility I shall give to this document in the evidence, but I am certain if they give me background material of the packaging industry that I should at least examine such writings.

Proceed, Mr. Gesell.

(Defendant's Exhibits 1 to 73, inclusive, with the exception of Exhibit 17 and 45, were received in evidence.)

Mr. GESELL. Your Honor, I come now to the section concerned with candy, chewing gum, and nuts. They are a group of exhibits from 74 to 104. This is another of the major end
7305 uses for cellophane, and we are of course here concerned with a different area of the market.

We have it in evidence that whereas the baked goods accounted for roughly 30 per cent. of the cellophane business, the candy market represents approximately 10 per cent. of Du Pont's cellophane sales. It has been approximately 10 per cent. for the last ten years or more, as shown by the Government's proofs, and our evidence will show today that it is roughly 10 million pounds of business in this market.

We have here in Exhibits 74 to 104, which I now offer at this time in evidence, a series of 31 different documents.

(Defendant's Exhibits 74 to 104, inclusive, were received in evidence.)

Mr. GESELL. These exhibits illustrate the developments in the period from August 1931 to August 1949. They are pooled together and compiled in a chronological way like the other material. Again we have market surveys, sales bulletins, laboratory reports,

tests analyzing properties of products, trade reports, advertisements, and so forth. I would like to point out again that the material concerns mainly the major accounts, large concerns like E. J. Brach & Sons, Curtiss Candy Company; two of the largest in the country making Peter Paul Mounds and the General Candy Company making O'Henrys.

7306 I have tried to reach a method of presentation here which will not involve turning each of the pages of all these some hundred exhibits on this subject, and with your Honor's permission I would like to summarize what is here and call attention to one or two of the documents and not read each one as we did in the case of the bakery exhibits.

I think the first general question or summary is What do the exhibits show were the competing materials in this area of the market? We find that there are four materials here. There is glassine, and we had examples of glassine competition in the exhibits 75 and 76, 78, 81, 85, 86, 88, 89, 93, 94, and 97.

There is foil competition here. We did not find the foil in the baked goods. But here there is foil competition as shown by 80, 81, 89, 99, 100, and 101.

There is some competition from pliofilm as shown by Exhibits 83, 84, 87, 98, 103, and 104.

There is competition, of course, by waxed paper, 75, 90, and 102.

There is also evidence of competition with Sylvania's cellophane. The exhibits already show in this case that Sylvania made substantial inroads into Du Pont's position in this candy field, and there are other exhibits here: 77, 85, 102, and 103——

7307 Mr. MINICUS. May I have a moment, please, sir? We are having a little difficulty on our side of the table following this presentation. Mr. Gesell is saying categorically there is competition with this, competition with that. No exhibits are pointed out, and we have no check on this thing at all. It may speed matters up a great deal and we are all in favor of that, but we would like an opportunity to find out what he means by competition and which exhibits shows which particular competition.

Mr. GESELL. I thought I was mentioning exhibits numbers.

Mr. MINICUS. We have not caught them over here. We heard a group of exhibits and certain things that show competition with them.

Mr. GESELL. As I said, there was substantial competition as shown in evidence already as between Du Pont and Sylvania in the candy field where Sylvania made competitive inroads, and there are more examples here in 77, 85, 102, and 103.

The story on candy, as is shown by these documents is somewhat comparable to the story as shown on bread. You recall that in the bread field the evidence showed that the cellophane was suc-

cessful in getting a position on the relatively high priced items where there was a larger margin of profit, and cellophane could get on because its extra cost permitted it to, but it could not get on the volume business, namely, white bread. Here in
7308 candy we have much the same situation. Cellophane is able to get on on the items like boxed candy and other more expensive items where there is a larger margin of profit to the packager, but the great bulk of this business is in the chocolate bars and chocolate candy bars which account for more than half of the total candy market, and there while cellophane succeeded momentarily to get on through aggressive selling in 1935, and was on for a while on such bars as Baby Ruth and O'Henry, it was displaced by glassine for reasons of cost and has never been able to get back on and is still trying to get back on.

Mr. MIXICUS. Your Honor, I object to all this line of evidence as entirely testimony by counsel. Since I made my last request he has not pointed out a specific document by name.

The COURT. He named four. I heard him.

Mr. MIXICUS. They are the same ones. They are trade reports. They say nothing about anything competing with anything else. If we are able to get one or two on a quick check like this we certainly have not been able to find anything mentioned of anything being in competition with anything else.

Mr. GESELL. We will also be able to show from these documents that as the price of cellophane declined it was possible for cellophane to get more effective sales.

7309 First, as to price competition, your Honor appreciates that we have here illustrative examples. Exhibit 74 which reviews the background of the candy development and the fourteen steps that took place in the development points out that when prices were reduced time and again cellophane was used on smaller units where product visibility is such a powerful factor. It points out also that cellophane's lowest position—this is back in the early days, this is dated 1931—is in the bar goods where only 30 per cent. of the business is wrapped in cellophane.

Then if your Honor will follow out the story you will find in these exhibits much evidence of competition. Exhibits 76, 85, and 91 show that cellophane was unable to compete with glassine on the 5c candy bars. There are examples of that of a technical character and examples of that in trade reports. Exhibit 76 will be one. Here they are trying to get on the Mars Milky Way and other bars, and the report states, "Mars' attitude at first was very cold, and he said he would have to buy printed Cellophane as cheaply as he could printed glassine before he would consider it.

"He liked the P. D. D. samples, so far as the design on the

Cellophane was concerned, but thought nothing at all of the tray idea."

"His present attitude is simply what Long said it was. He states he cannot increase cost of wrapper without either
7310 taking it out of the quality of the bar, or making the bar smaller, and he is willing to do neither."

There is more in the report showing the competition on that important account with glassine.

The exhibits show further on this competition that after selling cellophane to the Curtiss Candy Company for some of its products, Exhibit 92; Curtiss shifted to glassine on a cost basis, Exhibit 93, and wrapped its Baby Ruth bar in glassine. They show that Du Pont succeeded in getting the O'Henry chocolate bar business in competition with glassine, Exhibit 94; they lost it back to glassine on a basis of cost, Exhibit 95. In fact, these exhibits like the others show that shifts of business was constantly taking place due to cost. Cellophane lost to glassine on Dreams and Peter Paul bars in 87 because of price. Du Pont lost business to Pliofilm on the basis of quality and cost and business, 87, to waxed paper on Planters Peanut Candy Bars as a matter of consumer preference, Exhibit 102; to pliofilm on another account in 98. Conversely, they say that in the early days Du Pont was able to replace some of the other wrappers, particularly glassine and wax, on such things as Kisses, lollipops, and caramels by adapting the existing wrapping machines which were wrapping these materials so that they could use cellophane on an individually wrapped basis, Exhibit 75. Indeed, it showed that Du Pont did a great deal of work with the machinery, operated in forming the product by working
with them to make them adapt the older types of
7311 machines for cellophane in 79. There is evidence of competition between materials as to their properties, and glassine is shown to be preferable to cellophane on peanut bags, 78; cellophane and foil appear to be on equal terms as far as heat protection for chocolate candy is concerned, in 80; pliofilm is best for salted peanuts in 84. Glassine manufacturers are representing that they can offer research facilities comparable to Du Pont in 97. The exhibits show that Du Pont was seeking to combat these other materials by developing special types of film to handle sticky candy, 82. There is evidence of all the manufacturers' efforts to promote their wrapping materials in the activity of Du Pont in package development work in 87; studies of market potential in running tests with the customers as between competing materials in 85, of conducting special sales tests in 103, and of rendering sales service. In point of fact, we have the same market picture that we found before of intense competition between these dif-

ferent materials in all the different aspects of the business, and we see that cellophane was unable to get on to the items which represented the major volume for this end use.

The development of a special film was very helpful as shown in Exhibit 82.

Now, I just want to read one other trade report in 1940. I read an early one and I will read a later one just to show
7312 the situation as it continued. Here is Pet Paul, Inc. in 1940, Exhibit 86, and a Du Pont man calls upon him for his business with respect to Mounds and some of his other items, and the president of the company informs the salesman that as of December 1, 1940, they will discontinue cellophane on Mounds, replacing it with glassine which they will print themselves on Weiss Speedy machines. "This is due to rise in material costs of Mounds—saving of 25¢ per thousand wraps as approximately $36,000 per year."

In spite of our claims and arguments for our product, cellophane on that important account has lost out to glassine.

Mr. MINICUS. I wonder if Mr. Gessell would read a little bit further down, at least through the paragraph headed "Sylvania", your Honor.

The COURT. What is the exhibit?

Mr. MINICUS. Exhibit 86.

The COURT. What page?

Mr. MINICUS. At page 201.

Mr. GESELL. You want me to read the next paragraph?

Mr. MINICUS. Paragraph starting "Although we had known"——

Mr. GESELL. "Although we had known of their thinking in this direction it is a blow to du Pont and to writer, as we felt his Mound bar was outstanding package in the candy bar field, although
7313 visibility and protection did not enter into the picture, sparkle and eye appeal, with little tendency of collecting dust, was feature of 'Cellophane' wrap."

Nonetheless, we lost the business.

We might read on if we are going to read it.

"Sylvania now endeavoring to get half of gum business, but writer was assured of 100% of this business and it is increasing every week." Showing that Sylvania is actively soliciting the Du Pont account.

Mr. RENNINGER. If your Honor please——

The COURT. Are you going to talk about candy, chewing gum, and nuts?

Mr. RENNINGER. No, sir, I just want to note our continued objection to this type of documents.

Mr. GESELL. I don't know why they object, your Honor. They

are proof of the market. There is bound to be a time when we put our case on.

May I inquire, your Honor, whether the method of presentation that I have followed on candy is a method which at this stage the Court would like to see me continue, or would you prefer I took each individual document up? You have a contrast of both methods now.

The COURT. You would not have to guess hard on which I prefer.

Mr. GESELL. I will put it this way: Unless I hear to the
7314 contrary, I am going to follow the same method I just did in order to get over the material.

The COURT. Please do.

Mr. GESELL. The next section we come to is that relating to frozen foods. There we have exhibits 105 to 130, which I offer at this time.

(Defendant's Exhibit 105 to 130, inclusive, were received in evidence.)

Mr. GESELL. Again, these documents are arranged in chronological order, as we have in the past cases. They start at a somewhat later date, because, as your Honor will appreciate, except for the early work in 1927 which was done with Birdseye, frozen food has been a more recent development than some of these other uses. We have 26 exhibits going up to the year 1949—articles from technical and trade journals, trade reports from the sales force, and market survey reports. Here we have evidence of quite a number of different competitive materials.

Vegetable parchment at Exhibit 105, 107, 109, 110, 111, and 112; glassine at 107, 108, 109, 110, and 116; cellulose acetate at 109; Cry-O-Vac, a relatively unimportant new film, 110 and 129; metal foil, 113, 116, 117, 121, 122, and 130; wax paper, a great deal about waxed paper in this selection, 115, though 120, 122, 123, 124, 125, 126, 127, 128, 129, and 130, which all deal with wax paper; and there is an example of pliofilm in 116 and polyethylene
7315 of relatively little importance.

Here the trend of the sales department shows early work by Du Pont with Clarence Birdseye for the wrapping of frozen foods, including fish; efforts by General Sea Foods for developing packages in cooperation with Du Pont in 105 to 107; there is an indication of the early deficiencies of cellophane for this market in 108; finally the acceptance of cellophane as a carton liner in 109, and then some growth in the business, particularly in frozen meats and fish in 110 and 112.

Then we find that after having broadened the business and getting into frozen fruits and vegetables as a carton wrapper in

115, wax paper comes in with very stiff competition from 117 to 120. That is laid out in some detail with specific examples, and the competition grows with very substantial losses of business in this field owing to the aggressive development of a wax paper overwrap, particularly by Marathon in Exhibits 123 to 128, and again we run into the same general pattern. There is substantial evidence of the cheaper wax paper wrapping getting the business because of its cost in 120 and 123 right on up to 128. Detailed comparisons of costs are shown in trade journals 116. There is evidence of the effect of price reduction opening up markets in 111 and 112, and evidence of the original disadvantage of cellophane from the point of view of cost in 107 and 109.

7316 You will find tests of various kinds being made of quality, technical comparisons with the different materials, comparability as to printability analyzed, studies of the machines in 109, 114, and 116 and 119.

The COURT. Mr. Gesell, for my information are these the types of packaging materials that the housewife, for example, purchases to put frozen edibles in her locker?

Mr. GESELL. No. We are concerned here, as in other cases, with the sale to the retailer or the wholesaler himself of a packaging material.

The COURT. You mean in rolls or in sheets?

Mr. GESELL. Yes. I believe you can buy, and I believe individuals do buy sheets of cellophane and sheets of pliofilm for wrapping meats and other products in them, but the thrust of these documents is to the merchandising to the retailers of pre-packaged products, and we are not talking about the small volume of sales to individuals.

The COURT. I see.

Mr. GESELL. Here again, your Honor, we emphasize that these shifts of customers were not small accounts in all cases, but were big users with big markets of their own, because the evidence relates to such concerns as General Foods, Snow Crop, Pictsweet, Libby, McNeal & Libby, and other big customers. The great shift and successful competition of waxed paper in this field is particularly striking in the latter exhibits that begin around 117.

7317 Again I don't intend to read all of the different documents which we have here. I do want to point to a few documents by way of emphasis. In 110 in the paper trade journal you will see a study of the different materials at page 240, and you will see the different materials listed there and the tests with different papers analyzed from the point of view of greaseproofness, stainproofness, waterproofness, and so forth, on the next page 241, and a conclusion in this technical article at the top of

242 that Du Pont, Sylvania, Riegel, Paterson Parchment, Menasha Products, and Dewey and Almy cake products which are satisfactory from the point of view of these tests which were made in 1939 for use in packaging frozen foods.

7318 We have here rather technical articles of 114 written by experts in the Government and in Universities pointing up that same condition.

Later, if we get over to the 116 you will see in that article by Professor Winter of the Frozen Food Laboratory of the University of Minnesota which was written in September, 1948, an analysis of the materials and their properties and costs at page 260 prepared by the Frozen Food Laboratory Division of Horticulture, St. Paul, Minnesota, which I call your Honor's attention to.

There you find cellophane, glassine, aluminum foil, polyethylene, waxed locked paper, all analyzed from the point of view of their costs and their different characteristics for the wrapping of frozen food.

Then if we get over to these documents pertaining to the waxed papers competition you will see beginning at Exhibit 117 quite an effective group, I think a persuasive group of exhibits on that point.

In Exhibit 117 you see that the customer there has shifted to Marathon wax bags. You see in Exhibit 118 that the customer there, Snow Crop, is going to try out this high gloss paper and printed cellophane and see which one he is going to accept after a practical test in the field.

Then comes a reference in Exhibit 119 to competition of wax paper:

7319 "Asparagus and some others are going in printed glossy wax overwrap by Western Wax."

Your Honor appreciates this is a new and improved wax paper that came into the market about that time and gave cellophane a terrific sock on its business, and these carry on the story out through in the later years with other examples.

The COURT. What was the name of the company responsible for the latter product?

Mr. GESELL. Marathon Paper Company developed this particular wrap and also a company known as Western Wax, both manufacturers of a wax paper.

I think it is fair to say this is a case where cellophane pushed wax off and pushed some glassine off and wax got back in.

I just want to bring your Honor's mind back to the fact that this shifted business, this price competition, this research competition, all this inertia of an active, effective, competitive market was taking place and yet the Government is contending that all DuPont had to do was put up a sign and get the business and every-

one flocked to their doors; that all the evidence of interplay in the markets of competition are lacking and that we have a dominant, powerful, controlling position.

7320 No one can reach that conclusion, your Honor, in the light of this evidence. The reason they reached the conclusion was that they proceeded on the basis of theory and never got off their hind legs and went out and looked at what was happening in the market. And now I see them beginning to shift their position about the market as the force of this evidence comes in.

You will hear more of it, I am sure, when they get on their feet and talk. You don't want to talk about this either?

Mr. MINICUS. I didn't think it was answerable the way Mr. Gesell has put it.

Mr. GESELL. Exhibits 131 to 144 are concerned with the next section of these documents, fresh produce. Here, your Honor, the exhibits cover a very long period of time, 14 exhibits, and I offer them at this time, exhibits 131 to 144.

(The papers referred to were received in evidence and marked Defendant's Exhibit 131 to 144, inclusive.)

They comprise about 20 pages and they cover the entire period from August 23rd right up to May, 1950. They are trade reports, advertisements for wrapping materials, articles, trade journals, the same kind of material as before.

Here the competitive materials are different in some degree.

7321 There is very substantial evidence in this fresh produce of competition with cellulose acetate at 132, 133, 135, 136, 137, 139, 140, 141 and 144; competition with glassine and with pliofilm at ~~134, 137~~, 138 and 142; also further evidence of competition with Sylvania.

Here was a market where a great deal of developed work took place when you consider that in the early days most fresh produce was not wrapped in anything, sold in bulk, and it was not until the self-service stores and the other developments came along that packaging of these products took on prominence.

131 shows that fresh produce was mainly unwrapped in the early days. We are concerned here with such things as fresh berries, lettuce, brussel sprouts, cauliflower, the various run of vegetables most of which I don't like.

There are many types of packages. There is substantial competition here in cardboard cartons and other things of that sort which are on the periphery and probably outside of this package field.

The big development has been post-war here, as these documents will show, with very aggressive exploitation by Celanese of its acetate which is sold under the name of Lumarith in competition

with Good Year in pliofilm. There is evidence in advertising and merchandising competition.

The document shows that the cost of cellophane in 1933 was prohibitive, Exhibit 131. They indicate, however, that price was not a decisive factor as between the selection
7322 of cellophane and cellulose acetate in Exhibits 132 and 140 but that rather the competition in this particular end was a competition which was related to questions of quality.

There was evidence that tomatoes last longer and look better under cellulose acetate and the customers believed that because the tomatoes lasted longer and looked better they were justified in paying additional cost, Exhibit 132.

There is evidence of superior quality of cellulose acetate over cellophane in Exhibit 133. You will find detailed tests and studies of these two films on different kinds of vegetables like brussel sprouts, broccoli and cauliflower in Exhibit 137. You will find testing of the relative qualities of pliofilm.

The documents show statements like these which are indicative of the situation: Acetate provides better appearance and allows natural ripening and hence better taste. That is in Exhibit 140.

I quote: "Lumarith showed superior characteristics all respects—fogging, ripening and taste of tomatoes, and appearance of film." Exhibit 141.

Exhibit 142. Pliofilm is also soliciting business with perforated bag and a story of better feel on moist products. You see efforts to perforate cellophane to emulate the ripening qualities of cellulose acetate which left the same object moistureproof. Exhibits 137 and 141.

7323 You see that DuPont went out and developed a less than moisture-proof cellophane in order to get a better performance on the products in Exhibits 137 and 139.

They had a film LST which the document shows in Exhibit 141 made cellophane about equal to the properties of cellulose acetate, and they were able to do better in that business.

Again you have price competition, research competition, competition as to a composite group of properties, give and take in the market and shifts of business. Evidence of the shifts is at Exhibits 132, 138, 139, 140, and 144.

This is a dynamic, aggressive, active kind of market situation in every one of these end users. There is no inference where cellophane walks in and pulls out the basket and everything jumps in.

I wish we did not have the limitations of documentation and time because in each of these cases substantially more material of this kind could be presented.

We were forced to yield with a limited selection.

The next group is the group that relates to potato chips and other snacks beginning at Exhibit 145.

The COURT. We will recess for five minutes.

(At this point a brief recess was taken.)

7324 Mr. GESELL. Before I open another section, your Honor, may I inquire as to the status of the exhibits in the group between 74 and 145 which we are now up to? Do I understand the Government——

The COURT. I understand they have reserved their objections to all those exhibits.

Mr. RENNINGER. That is right, your Honor, and also to the proposed documents.

Mr. GESELL. Do I understand the documents are admitted on the basis of the rulings we worked out on Exhibit 74?

The COURT. That is correct. That is my understanding, at least.

Mr. RENNINGER. If the Court please, there are a few of these trade-journal publications that should be taken up individually later on when we come to them, not in this particular group Mr. Gesell has finished up to now. Later on, due to their peculiar characteristics, we would like to discuss those in a little more detail when we come to them.

The COURT. Very well, proceed.

Mr. GESELL. But it is all clear up to Exhibit 145, as I understand.

This group, your Honor, we are down to potato chips and other snacks; Exhibits 145 to 153 commencing at page 306 of this
7325 first volume of the exhibits. There are nine exhibits. They range in the period from February, 1936 to February, 1949.

This has been an expanding and developing field of cellophane use. We have a laboratory test report, correspondence, trade articles, advertising and so forth.

I offer this entire group, Exhibits 145 to 153 with the exception of Exhibit 146, which we do not offer.

The COURT. Do I understand by that it is withdrawn?

Mr. GESELL. Yes, your Honor. From time to time we are pulling one out and I will indicate them as we go along.

The COURT. Very well, sir.

(Papers referred to were received in evidence and marked Defendant's Exhibits 145, 147 to 153, inclusive.)

Mr. GESELL. The competitive materials in this end use are wax paper and glassine. Wax paper at Exhibits 146 and 147; glassine at Exhibits 145, 147, 148, 150, 151 and 152; aluminum foil at Exhibits 145 and 153 and one pliofilm document at Exhibit 147.

These documents really highlight the concern with moisture-proofness and rancidity proofness at Exhibits 145, 149 and 151 with the cost of cellophane compared with competitive wraps at 146.

7326 Mr. BENNINGER: I beg your pardon. I understood 146 was withdrawn.

Mr. GESELL. You are right. Excuse me.

And with methods of distribution of potato chips at Exhibit 151.

I want to refer to a few examples of the documents by way of illustration. I call your Honor's attention to the technical study at page 310 at Exhibit 145 comparing cellophane and foil on potato chips and then turn over to Exhibit 148, a trade report. There is the customer using laminated glassine bags and is not interested in cellophane at present.

At Exhibit 149 the customer packing corn chips and potato chips is using, as you will see up there, glassine.

Their past experience with cellophane has turned them against visibility. They are working toward complete opacity on the theory their customer knows what is inside. Shifting from cellophane.

Then I call attention to the ads which appear at Exhibits 152 and 153 showing glassine and foil with advertisements of their packages and their sales arguments in an effort to get recognition in that field of use.

The next section is the section relating to a variety of miscellaneous foods entitled: Macaroni, noodles, rice and other cereal products.

7327 It comprehends Exhibits 154 through 164, which I now offer in evidence.

(The papers referred to were received in evidence and marked Defendant's Exhibits 154 to 164 inclusive.)

In this group we have only eleven exhibits covering a period from October, 1932 to December, 1949. The competitive materials are cellulose acetate, glassine, wax paper, Kraft paper, cartons and window boxes.

There is evidence of cost competition on tapioca at Exhibit 154. In Exhibit 163 the statement appears that Kellogg cereals listened interestedly and admitted the story to have merit but one thing and only one thing put cellophane out of the picture—cost.

There is quality competition involving not only moisture-proofness generally but problems of breakage on tapioca at Exhibit 154 and breakage on paste goods on Exhibit 156. Emphasis is given to the relative moisture-proofness of wax glassine and cellophane on cereal and wax paper at Exhibits 163 and 164.

Proof of loss of business on tapioca, loss of business on paste goods.

One or two of the documents require perhaps specific attention. The group is very small.

You will notice, for example, at Exhibit 154 in the trade
7328 report there in 41 that the concern stated they have definitely decided to discontinue cellophane bags on tapioca. This due to breakage mainly, slow turnover items and other display position received by the package in the store.

We tried to sell them on the idea of using cellophane in their window box cartons, and the response is given as this states in 3-c, believes production costs would be prohibitive.

So we have others to the same effect. You will see the Kroger Company is covered in Exhibit 156 in a report dated July, 1947. It is a large account and it has a large number of items. They are using window cartons. They are not sure they have the right package. You see there listed their objections to cellophane and our efforts to sell.

7329 The COURT. Will you turn to the index to volume 1, Mr. Gesell?

Mr. GESELL. Yes.

The COURT. I direct your attention to I-A-3. I have for 1-A-1, that is the baking industry, a figure of 30 per cent for sales.

Mr. GESELL. Yes.

The COURT. I have candy, chewing gum and nuts ten per cent.

Mr. GESELL. Yes.

The COURT. But I don't have it for the remaining four items.

Mr. GESELL. Your Honor is right. The reason I was not able to give you those figures is they are not yet in the record for these other uses.

The COURT. I see.

Mr. GESELL. We will present them and show the relative percentages, but the Government's figures only give such early data on those relatively newer uses that they are not represented. We will have a statistical breakdown of these end uses, and I think I should say, your Honor, that I hope I have made this clear, that we do intend to fill out and supplement this illustrative documentation with actual market testimony from people who have been concerned with the problems, and all we are trying to
7330 do here is take care of documentary phases.

Now I would like to take up volume II and take a look at the first section there. If your Honor opens it this will give me a chance to explain the system we have used. We have carried over on each of these documents a repetition of the index insofar as relates to the content of the particular document, so that by opening any volume you can see what part of the outline falls in that volume and we are now at I-A-7, the other food products, which covers 165 to 188. This represents about three per cent of

sales in 1941. I think it is somewhat larger today, but according to the Government exhibits it is three per cent in 1941.

There are twenty-four exhibits and they cover forty pages for a period from March, 1933 up until December, 1949, and again we have magazine articles, trade reports, and other documents of that character. The products involved are dried fruits and dried beans and cheese and meat, fish and coffee, and all the miscellaneous so-called unclassified foods. In fact, a great variety of materials is to be found, and you would expect that in a situation where such a variety of different special products are involved, each of which has their own peculiar problems.

Pliofilm is quite active in this field, as shown by Exhibits
7331 165, 166 through 169, 172, 173, 175 to 177. There is an example of competition with cellulose acetate at 167. There are five examples of competition with glassine in Exhibits 169, 178, 179, 180, and 186; with waxed paper at 169, 181, 186 through 188; of vegetable parchment, 169 and 174; of Kraft paper, 169 and 186; one example of Saran at 170; and five or six examples of aluminum foil at 169, 171, 177, 182, and 183.

Here again the documents, as in the other cases, are concerned with questions of relative cost, questions of quality competition, and illustrates shifts of business of various kinds. For example, on the question of relative cost Exhibit 173 shows cost advantage of cellophane as against pliofilm and secondary protection advantages of pliofilm as against cellophane, 173. In 174 the price advantage of parchment over cellophane as a fish wrap appears. Trade report states that the customer still argues higher production cost and will not consider yet going on to cellophane.

In 175 we see a little new aspect of this particular market on meats where the customer is arguing that pliofilm saves fresh weight of meat loaf and hence gives bigger profits to the customer. than when the product is wrapped in cellophane.

In 177 the trade report states that the customer further states that they are planning to adopt a foil bag which is considerably less expensive than cellophane.

7332 We see evidence of the cost advantages of glassine as a coffee bag in 178 and of waxed paper as against cellophane in 187.

There is an interesting one in 181 complaining of mechanical difficulties with cellophane, breakage, poor sealing, sticking, and other problems of that kind; and of a customer in 187 running machine tests on cellophane and against the present wax paper wrap.

Quality competition appears as to Saran in 170, pliofilm in 172. Articles discuss cause of moisture intention of pliofilm as against cellophane in 175, comparable protective qualities of glassine as

against cellophane are analyzed in 178, 179, and 180. The customer's preference for protection of foil against cellophane for Dessert Mix is in 182. A DuPont Laboratory report states that it has conducted tests and says the efficiency of the double wall unit of cellophane—I interpolate here cellophane—is not quite equal to that afforded by any present package and carton with foil overwrap.

There is a complaint on a customer about breakage of cellophane packages in 184, and then again there is the shift of the business.

In 168 if your Honor will turn to that report for a minute you will see a report there where here is a packer in California who is packing fresh products and fruit, and he says that their
7333 largest customer, A & P, demands pliofilm and they are forced to use it. It says they favored DuPont cellophane from all standpoints, cost, production, speed, clarity, and so forth, but they feel the war is over and the customer is king. There you see the consumer preference operating to the disadvantage of cellophane, just as it often operated to its advantage.

Mr. MINICUS. There is an example, if I may say so, your Honor, of this type of hearsay we are talking about. There is plenty of reason to check the credibility of a statement like that.

Mr. GESELL. In 172 you see the result of tests customers made on cheese. "Based on these findings," it states, "they are going to package cheese in pliofilm in the future and will discontinue the use of cellophane for this purpose."

In 181 there is an example of the shift from cellophane to wax paper for coffee bags.

I think, perhaps, your Honor, you might feel we have gotten in a good number of exhibits today.

The COURT. I think you have done wonderfully well today, getting in 179 exhibits.

Mr. GESELL. I would like before we adjourn to inquire whether we may expect the Government to comment at the point where we reach Exhibit 230, which is the conclusion of these illustra-
7334 tive examples? They have hung back quite a long time, and I think in fairness I should get some indication of their position before I go into the discussion of the illustrative ads and the sections under B, C, and D of the outline.

Mr. MINICUS. Is that 230?

Mr. GESELL. Yes.

Mr. MINICUS. The Government will not comment at that time, your Honor.

Mr. GESELL. Let us just take that up, your Honor, in the remaining time here.

The COURT. Yes.

Mr. GESELL. Isn't it perhaps appropriate at some stage that I get an indication of the Government's position? This hang-dog attitude does not bring out the issues. Why can't we hear what they say on a mass of exhibits that covers 230 different exhibits and comes here on the pagination to well into 500 pages of text, and then we can go on and take up some of these other illustrative examples. But if they have points, why can't they make them and then if those points are not borne out by the evidence I am in a position to point it out as I come to subsequent bits of evidence.

Mr. MINICUS. Mr. Gesell is quite inconsistent. He said just a few minutes ago that anything I say probably would not be worth hearing anyway. We would just as soon, your Honor, wait
7335 until we see the issue in this connection. We have heard a lot of documents enumerated today and we have not seen the substance of them. This is a matter of substitute materials and is a single issue, and we would prefer, your Honor, to answer it at one time.

The COURT. You can think it over this evening. I will put the question to you tomorrow morning at some time during the course of the morning as to what you intend to do with respect to any comment you may see fit to make on these exhibits, because once I pass the exhibits I am through with them. I want to take up the next volume.

Mr. MINICUS. Your Honor, when the subject matter is finished in this volume we will comment. We simply want to wait until the subject matter is finished to comment on it. We are not going to pass any of this material on substitute materials without a comment.

Mr. GESELL. None of this relates to substitute materials, your Honor. That phrase is constantly brought in, but it has nothing to do with the proof.

But can't we have at some point after 500 pages an indication of the Government's position? If they are not prepared I don't mind them saying so and I understand their problem, but if they are prepared why can't we have the benefit of their position?

The COURT. Some time during the course of tomorrow
7336 morning's session the court will put the question to the Government directly.

Mr. GESELL. Thank you.

Mr. MINICUS. May I ask in regard to that if the Court may order us at some particular time to comment?

The COURT. I don't know what your answer to my question is going to be.

Mr. MINICUS. I think I have it right now, your Honor. We want to hear the entire substance of this issue in the first two

volumes which is under their first Roman numeral before we answer. We feel that the whole thing is so interrelated that it can be answered in a time-saving manner by handling the entire subject at one time.

The COURT. Just direct your attention to the index of volume II, Mr. Minicus. As I understand, your position is that after the defense finishes its discussion of the matters under I-D then you wish to be heard?

Mr. MINICUS. That is correct, sir.

The COURT. That right will be granted to you.

Adjourn court to tomorrow morning at 10:30.

(At this point the trial was adjourned to Thursday, October 25, 1951, at 10:30 o'clock, A. M.)

7337 THURSDAY, OCTOBER 25, 1951, 10:30 O'CLOCK A. M.

Present: As before noted.

The COURT. Mr. Gesell.

Mr. GESELL. Yesterday I finished discussing I-A-7 relating to other food products, Exhibits 165 to 188, the first group in Volume II, and I now offer those exhibits.

(Defendant's Exhibits 165 to 188 inclusive were received in evidence.)

We turn, therefore, this morning to a discussion of tobacco and at this point your Honor will note that we are moving out of the food field and into other areas of packaging use.

The record shows in general now and will show in detail later that the food uses as a group account for in excess of 65 per cent of the total cellophane sold for packaging purposes.

The COURT. What was that percentage?

Mr. GESELL. Sixty-five per cent. Now, in this tobacco field there are quite a variety of different products and their problems are quite different.

Of course, cigarettes are by far the biggest item in this group;
7338 in fact, one of the big items in the sale of cellophane generally. Cigarettes account for about 13 to 14 per cent of duPont's cellophane sales, according to the record, and then in the tobacco group you have lots of different miscellaneous items like cigars and plug tobacco and different tobacco items of that kind.

Our first few exhibits in the group relate to cigarettes, and then we take up some examples of the situation in cigars and other tobacco uses.

We are at page 379 Exhibit 189, in Volume II. Now, the story as to cigarettes is a very brief one. When cellophane came along

cigarettes were wrapped in glassine, and after moisture-proof cellophane was developed it succeeded with the bettering of its properties in displacing glassine on practically all cigarette packages.

Since that time as your Honor is aware from his common experience, cellophane has been the outer wrap on the cigarette package in most cases functioning in combination with two other flexible packaging materials, paper and foil, to make a combination 3-way package.

The COURT. For my own interest, why did they ever wrap cigarettes with cellophane or any other outer cover?

The GESELL. The problem is one of moistureproofness, in the first instance, the necessity of maintaining the cigarettes moist, There is also the question of a uniform, attractive package.

The function that cellophane plays is both in terms
7339 of an outer wrap and therefore display as well as more importantly moistureproofness, and maintaining the moistureproofness of the package.

The cigarette companies, as our documents show and the evidence will show, have been extremely sensitive to any changes in their packages for merchandising reasons, and our evidence is directed primarily to show the displacement of glassine, and then technical reports of duPont showing experimentation by cigarette companies with other packaging materials and the existence of the market of other package materials which have the necessary properties to be used as wrapping material for cigarettes.
7340 The first document is 189, and this group runs to 210, and I offer them in evidence at this time.

(Defendant's Exhibits 189 to 210, inclusive, were received in evidence.)

Mr. GESELL. The first group is 189, 190 and 191. These contain an inquiry in 1932, which was not long after cellophane had gotten onto the cigarette package, from Mr. Carpenter inquiring what could be done to reduce the cost of the package in order to make cellophane's position more secure, and a reply by Mr. Yerkes outlining the fact that various packaging suggestions have been offered along that line to the cigarette companies, but that the cigarette companies are extremely cautious about making changes in the form of their package which they have established as standard. He says that the general attitude of all the cigarette companies is that the last thing in the world they want to contemplate is a change of any kind in their package and that Du Pont is up against a stone wall in getting them to consider an actual change—that is Exhibit 190. And in 191 he refers to the fact that glassine had previously been on the package, had been displaced by cellophane, and that

the companies have now established cellophane as standard over a period of years.

Then we have over in 193 a detailed comparison of the wrapping qualities of a whole group of packaging materials which Du Pont wrapped in its technical laboratories on Lucky Strikes
7341 and Chesterfield cigarettes back in 1934——

The COURT. Before you pass that, will you explain that table to me so that I will be able to interpret it when I come to study it?

Mr. GESELL. Which table are you at, your Honor?

The COURT. DX–193.

Mr. GESELL. At page 389?

The COURT. Yes, sir.

Mr. GESELL. There are two tables there, one relating to Luckies and one to Chesterfield cigarettes. There is a list of the different wrapping materials which the technical laboratory wrapped on those packages.

The COURT. What I want to know is, what do the columns mean, 7, 14, 21, 28?

Mr. GESELL. That is the number of days they remained in the wrap before tested. Above that is time in days, and the loss in weight for each of those day intervals measures in part the loss of the moisture and therefore the permeability of the material, it is my understanding of the tests.

You will see further schedules on 390 of other different tests of this moistureproof and permeability factor, and then a summary of the results on 394, in which the technical service section says that, "As a result of this test we find that M. T., Regalite, waxed glassine, Aqualene, Flexo Aqualene, moistureproof 'Cello-
7342 phane'—" of several different types—"when properly sealed keep cigarettes in a satisfactory smokable condition over a twenty-eight day exposure to 17% R. H."—that is relative humidity. That is the basis on which these different materials were tested at that particular test.

Then at 194 we turn to a group of documents relating to the other tobacco uses. Here this group of documents shows participation in the tobacco business by foil and by wax paper and glassines and some indication of the appearance of polythene in certain cases. There was a very sharp competitive struggle between cellophane and foil as to cigars——

The COURT. By foil you mean the ordinary tinfoil?

Mr. GESELL. The ordinary tinfoil, which later, as the documents will show, was improved by laminating it to another flexible material, heat sealing glassine, in order to give a laminated wrap which would equal cellophane.

We already have some evidence of that competitive struggle in the record, where it shows that Reynolds Metals Company, as early as 1937, took substantial business from cellophane and again in 1939 cut deeply into Du Pont's business by its foil.

Here in 1937 in the bulletin is a reference to the foil competition on cigars and the sales arguments that cellophane is developing as a means of combating foil, of course placing in this instance great emphasis on transparency, because foil is of these materials
7343 the only one which is not transparent and particularly was not transparent when laminated with wax glassine liners. You get some measure of the discussion of the competition in the sales bulletin.

Then there are tests as between foil and cellophane as a cigar wrap in 195, and the conclusion is that heat-sealing foil affords better protection, at page 401, to cigars than does a wrap of M. T. cellophane, and the report states, "This superior protection is undoubtedly due to the very good permeability of the foil wrap and also to a very efficient seal." The tests are all presented in that report.

Subsequent bulletins and tests appear.

Then over in 197 we get to chewing tobacco, which is another use within this general tobacco area——

The COURT. Before you leave cigars, just for my own information, if you have a cigar wrapped in cellophane and you put it in your humidor, will the cellophane permit the moisture you put in the humidor to keep the cigar fresh?

Mr. GESELL. I don't know. I am informed that if the seal is not too tight and is left to allow some passage of moisture, then it can pick some up. I can get the answer to that.

The COURT. It has nothing to do with this case at all.

Mr. GESELL. It may have something to do with your cigars.

The COURT. I was just interested in what to do with
7344 my cigars.

Mr. GESELL. I will get the answer. I don't smoke them.

In 197 we get to chewing tobacco, and I guess there we are probably on common ground, that we don't chew, but apparently a lot of people do. Here are sales reports showing the use of Riegelite, a glassine—197, for example, on Dan Patch and Peachy Scrap, and reference at the bottom of the page there to the price Riegelite being way down below cellophane.

7345 On the same exhibit on 408 they are very cost conscious on the unit, the report states, and they don't want to consider cellophane on a particular unit because of its cost.

Then there are other reports of the same kind relating to plug tobacco, different kinds, 198. The Scotten people report they are against the idea of cellophane on a big way because of cost,

page 409, and there are several references in Exhibit 198 of the same character. One at the bottom of page 410. It says, "Deliveries and increased cost of Diaphane paper will undoubtedly aid their decision towards cellophane."

Here is a case where with a rise in price of glassine, cellophane gets a better show on the business because the price disadvantage is minimized.

In Exhibit 199 there is evidence of the same kind pertaining to foil.

Exhibit 200, comparable material, concerning wax paper, where the report is final that the user, Bloch Brothers, is prepared to go to cellophane but it will take another price reduction at least before it will adopt the material.

You get a sharp comparison of the cost differences in Exhibit 201 at page 415 where the wax paper costs show, they are right below the break in the report, at 8½ cents a pound. Our evidence shows in 1939 cellophane was sold at 41 cents a pound.

7346 The report notes that cost is too great but a reduction brings adoption nearer.

In this field, Exhibit 202, we have the same thing. The report states that they are doing a fair job with Riegel glassine and feel cost pretty high considering the fact that they are over-weight brands and they don't want to shift to cellophane.

We have a number of examples, comparison of glassine costs, Exhibit 203. It appears under Item 3 in that exhibit.

Then here at the end we see some evidence of competition in 1946 by foil in the field of cigarettes and by pliofilm in the field of cigarettes. Apparently neither one of them was very successful in the long run but you will see in Exhibit 204 that Phillip Morris is working on pliofilm, and in Exhibit 207 a discussion of a basic change by Brown & Williamson in their package adopting foil on Kools and other brands.

Mr. RENNINGER. If your Honor please, I think this Exhibit 207 should be brought to your Honor's attention as to the character of the document. Exhibit 207, as you see, is a trade report taken from——

Mr. GESELL. I don't think so.

The COURT. 207?

7347 Mr. RENNINGER. It is an article appearing in a trade magazine, shall I put it that way? It is definitely—the source material given at the end is taken from the Reynolds Metals Company in Richmond, Virginia.

The previous exhibit, the Defendant's Exhibit 206, discusses the gossip of the Modern Packaging Magazine which came out with an article on this aluminum foil.

I want to point out to your Honor's attention the complete hearsay of this type of article appearing in a trade publication, and also the fact that all statements shown seem to be based upon statements made to the magazine by the particular company involved.

The COURT. What is the difference between this article and an ad in the Ladies Home Journal or a radio commercial?

Mr. RENNINGER. Frankly, I don't see where there is any difference. I am talking about the probative value of these articles in trade publications.

The COURT. Consider that the Court will evaluate all types of evidence as to its probative value.

Mr. Renninger. I want to know everything there is to know about this case, and I don't think that this article and material supplied by the Reynolds Company is going to decide the case for or against you.

Mr. RENNINGER. No, sir. I just wanted to point up the hearsay statements and the source material of these
7348 trade articles appearing in trade magazines.

The COURT. I have enough to do to decide this case, and I am not going to have my mind taken aside on these questions of probing the veracity of an article on some cigarette manufacturer's statements. I take it that it is background material.

Mr. GESELL. We tried to tie it in within the limits of reasonable documentation.

In Exhibit 208 our saleman is calling on Brown & Williamson, and they are wrapping in foil and running these tests.

The COURT. Proceed, Mr. Gesell.

Mr. GESELL. That completes the material with respect to tobacco, and takes us over to this general area of textile paper and miscellaneous products. With the completion of this, which is the last of the sort of group we have been discussing, I-A-9, it starts at page 437 and goes to 463, and we will have had illustrations from different end uses which our evidence will show account for in excess of 80 per cent of the total business. There is a certain amount that is unclassified, there is a certain amount that is export, there is a certain amount that is non-packaging, but we will have covered all the main end uses of cellophane by way of illustration.

I think I should point out, your Honor, that here again we have considerable evidence already in the record, and
7349 what we are doing is supplementing it where it seems appropriate.

There is evidence of the sharp competition by acetate in textiles in 1934 and 1939. There is also evidence of the constant pull and

tug which has been taking place with Scott Tissue—Kimberly-Clark Kleenex—where glassine was first on the package, then cellophane took a position and then Kleenex came out both in glassine and cellophane, and there has been considerable shift in that account right along which is an important account in this area of packaging uses.

The COURT. Are you in a position to tell me during what periods did this nip and tuck technique occur? Yearly accounts, were they?

Mr. GESELL. It was constant selling, yes. None of this is sold on a requirements basis. It is a constant business of selling, and therefore, it is a constant solicitation by all people and the manufacturers' changes from time to time as his inventory position and his redesigning of the package dictates.

Kimberly-Clark is one of the people who package the same article in more than one material at the same time. There are such customers but not too many.

Here we have evidence of competition by pliofilm at Exhibit 212, 216, 217, 229 and 230; competition by wrapping tissue at Exhibit 214 and 215; competition by cellulose acetate which fills out
7350 some of the exhibits already in on that subject, Exhibits 218, 225; several examples of competition by glassine, Exhibits 219, 221, 222, 223 and 226 and kraft paper at Exhibit 224 and 227.

Again their is discussion of the relative cost and price of the articles and shifts of business, quality competition, all of the various items that we have had in the other sections are illustrated. I don't thing there is any necessity of speaking and discussing any particular one of the documents in this group.

I might give just a few examples. At Exhibit 224 your Honor will see an example where the customer is claiming that the price of cellophane is too much to replace brown kraft paper on cheaper lines. That is referring to Curtains and other millinery items of that kind.

At Exhibit 226 they refer to the decisive cost advantage of glassine as over cellophane two to one. In the case of Corona Corporation in 1939 you see that they are also a purchaser of celluloid film.

The COURT. Let me ask you this: Are you going to have a live witness to give me testimony about a trade report, what it is, what its function is and how he got his material that goes into it?

Mr. GESELL. Yes, and what reliance is placed on the report in the operation of the company's business.

7351 The COURT. Fine.

Mr. GESELL. We now, your Honor, turn to—I should offer Exhibits 211 to 230 which I just discussed.

(Defendant's Exhibits 211 to 230, inclusive, were received in evidence.)

Mr. GESELL. We then turn to the next group at Exhibit 231.

The COURT. This is where the Government wants to be heard.

Mr. RENNINGER. At the end of the second volume.

The COURT. I see.

Mr. GESELL. They want me to go through the volume.

Mr. RENNINGER. I would like to object to the Defendant's proposed Exhibit 228 on the grounds of authenticity, if for no other reason.

The COURT. Well, he has you there, Mr. Gesell.

Mr. GESELL. I think he does. I think he is right. I tried to take those out as I have gone through. There are two or three others like that.

I now take up the group of advertisements which are called illustrative advertisements, Exhibits 231 to 288, which I now offer in evidence.

(Defendant's Exhibits 231 to 288, inclusive, were received in evidence.)

The COURT. Proceed.

7352 Mr. GESELL. There is a group here of 58 ads and they cover a period going back as early as 1926 and coming on up to date.

7353 I assume your Honor will flip the pages and glance at them, and it seemed to me the best way for me to present them would be simply to discuss them by type of material and see if I could in capsule form indicate the representations that are being made in this market by the different manufacturers of flexible materials.

Mr. MINICUS. May we have an understanding of that, your Honor. That sounded to me as though Mr. Gesell said he was going to indicate the representations in these ads as evidence of what is going on in the market. Now, can that be done or is that not within the scope of our objections? I quite understand your Honor's position in wanting to read these trade reports and in wanting to read these articles as background material. But what information at all could anyone derive from 58 advertisements cluttering up the record, when I think we have all agreed yesterday that the representations in the advertisements cannot be used for the veracity of the statements.

The COURT. If I were doing a research problem covering the period in question, I would undoubtedly go to the New York City Library and ask for newspapers and look at ads such as this to find out what were the current advertising *mores*, if nothing else, during the period.

Mr. GESELL. What were these fellows saying? I am not saying it is true or not. What were they saying?

Mr. MINICUS. Yes, your Honor.

7354 Mr. GESELL. And representations are proof of competition.

Now, aluminum foil——

Mr. MINICUS. That statement I want to draw particular attention to, your Honor, that representations are the proof of competition.

Mr. GESELL. I did not say "the proof"; I say they are proof, and I insist they are.

Mr. MINICUS. I insist that the representations are not admissible in an advertisement as proof of anything, certainly not the proof of competition in this industry.

Mr. GESELL. This is a business where things have to be sold, your Honor. You can't sell without saying something.

The COURT. You see, here is our difficulty, Mr. Minicus. If I accept your legal theory, all this is out the window.

Mr. MINICUS. That is very true.

The COURT. But if I do not accept your legal theory, then it seems to me I should be in a position to know what was going on in the industry, what were the package manufacturers telling the public, what were they offering the public? That is why I want to look at these ads.

Mr. MINICUS. Very true, your Honor, but I hope when you are looking at them—I know you will look at them in the light or realization that here are statements that Mr. Gesell

7355 is admittedly putting in as proof of competition on which we have no right of cross-examination. Therefore we are not able to test credibility of those statements.

With that understanding I have no further objection to the advertisements.

The COURT. Well, I always read every advertisement with a few hundred thousand grains of salt.

Mr. MINICUS. Thank you, sir.

The COURT. Do you want to proceed, Mr. Gesell?

Mr. GESELL. Yes, I am anxious to.

First, as to aluminum foil, we have two ads, 259 and 287. They represent that it is moisture-resistant, gas-proof, grease-proof, light-proof, non-toxic, low temperature durability dead folding, heat sealing, good machine running qualities, no deterioration on aging.

There are ads as to moistureproof cellophane at 234, 241, 254, 274, and 288, both Du Pont and cellophane—moistureproof, dirt-

proof, transparent, tailored for particular uses, good machine running qualities.

Cellulose acetate—a group of seven or eight ads, 238, 250, 261, 266, 272, 282 and 240, and they are ads by the Celluloid Corporation and Celanese Corporation. What do they say about cellulose acetate? This is in the period 1934 to 1950—transparent, greaseproof, waterproof, sweatproof, shrinkproof, moistureproof, non-
inflammable, durable, available in rolls or sheets, non-
7356 fogging under refrigeration, useful for packaging meats and fresh vegetables, heat-sealing on either side, does not deteriorate with age, easily printable, durable at varying temperatures, useful for packaging textiles.

Glassine—a group of ads from the Riegel Corporation, four of them, 246, 247, 249 and 255. They advertise transparent, tailor-made, cheap, sealable, good machine running qualities, moisture-proof, greaseproof, printable, laminable, one of the many papers useful for particular packaging uses.

Papers are advertised by Riegel Paper in 245, 246, 251 and 255—great variety of tailor-made papers, varieties increased from 130 to 230 between 1940 and 1945, they say. Some papers are moisture-proof, greaseproof. Locker paper is moisture-resistant, blood-proof and inexpensive.

Vegetable parchment—232 and 246, both Newark Paraffin and Parchment Paper Company and Riegel Paper, advertising, transparent, moistureproof, greaseproof, self-sealing, printable, high wet strength, heat sealable, low temperature durability, low cost.

Pliofilm—a large group of ads from Goodyear, Shellmar and Milprint, 242, 244, 256, 263, 265, 278, 283, 243, 248, 257, 264, 273 and 279 and they say—transparent, moistureproof, dimensionally stable, tough, durable, good machine-running qualities, odorless, tasteless, stretchable, liquid-proof, reusable, puncture-resistant, flexible. And they advertise for all the uses we have been reviewing.

7357 Polyethylene, four ads, 262, 267, 270 and 275, both by Bakelite and Visking, and they say, transparent, stretchable, durable at low temperatures, tough, smooth, non-toxic, odorless, tasteless, chemically inert, heat-sealable, flexible, low water vapor transmission, tear-proof, gives tight package. In all cases your Honor will notice the holding out of comparable kinds of properties seeking the trade.

Saran, from Dow Chemical, 253 and 285—transparent, high moistureproofness, tough, resistant to chemicals, flexible at low temperatures, pliable, impermeable to gases, odorless, non-aging, good machine-running qualities, gives tight package, has lowest moisture transmission rate.

Vinyl Plastic Film of the Bakelite Corporation, in 267—tough, flexible, transparent, formable, resistant to chemicals, has good color.

Waxed Paper, ads in 233, 258, 271, 247 and 269, from Kalamazoo, from Riegel, from Marathon, from Nashua, four concerns, and what do they say about waxed paper? Moistureproof, high protective quality, good wet strength, low cost, provides a white opaque background plus an attractive picture of the product, heat-sealable, good machine-running qualities, printable, gives uniformly high waxed protection.

Then we have some advertisements, your Honor, of packaging machinery, four of them, 235, 237, 236 and 268, by the Package Machinery Company and the Battle Creek Bread Wrap-
7358 ping Machine Company. And they say their machines are usable interchangeably for cellophane and foil, for wrapping chewing gum. One says one machine handles cellophane, waxed paper, glassine, printed papers and so forth. Battle Creek advertises a machine for packaging crackers either with cellophane or waxed glassine.

Then finally we have ads of converted package items, and these, your Honor, I wish to mention are particularly from Milprint and from Shellmar and Rhinelander, and others, and they say that they have different wraps—and you can get any wrap you want from them for these materials, and combinations of wraps are advertised, as transparent. Shellmar advertises the cellophane and board combination which is transparent, firm, protective and cheap. Rhinelander advertises a pliofilm and paper lamination which is heat-sealable, highly protective, transparent and printable. Milpint advertises the Revelation bread wrap, a combination of waxed paper and cellophane. Bakelite advertises a vinyl and foil combination as being sturdy, flexible, sealable, non-porous, resistant to oil, grease, moisture and chemicals. Celanese advertises an acetate-lined window box for frankfurters and like products which is transparent, grease-proof, durable, breathing, i. e., non-fogging, and so forth. Celanese also advertises an acetate window box as being flat, smooth, wrinkle-free and printable.

And so you see in the trade the cross-current of
7359 these representations of comparable groupings of composite properties and the seeking by all manufacturers, by the converters and by the machine manufacturers of an opportunity to serve the market with the best combination of products, with the best properties, and the clear impression that can be gained from this is that in the market, whether these representations be true or not, it is clear what attributes govern the saleability of a

product, and it is clear that there is a real searching out for the business by these highly competitive groups of companies.

Mr. MINICUS. If I may recapitulate, your Honor, now, I would like to review the situation of the parties here.

Mr. Gesell has the affirmative on this point. He has just pointed out probably several hundred different attributes in connection with a great many different materials. That has gone into evidence and he has said that is for the truth of the representations.

The COURT. No, he did not say that. He said whether they were true or false, it is indicative of the qualities which attracted the consumer to any particular item in the packaging industry.

Mr. MINICUS. Even accepting that, your Honor, there is now evidence that these qualities in connection with certain materials—there are a great many materials——

7360 Mr. GESELL. I can't hear Mr. Minicus. I don't like to interrupt, but I can't hear him.

Mr. MINICUS. There is now in evidence a great many characteristics and a great many materials. It seems to me that we cannot go ahead in our defense until we take each one of these characteristics——

The COURT. In your defense?

Mr. MINICUS. He has the affirmative on this point.

Mr. GESELL. Of course I don't. He is claiming the market.

Mr. MINICUS. There seems to be a difference of opinion, but at least he is bearing the proof right now. We have to meet that.

It seems to me that to meet each one of these characteristics and to overcome all of this stuff that is based on nothing but newspaper advertisements, the Government is going to have to have a great deal of time and go to a great deal of expense in investigating each one of these characteristics in connection with each one of the products involved. We believe that we can disprove it, but the effect is going to be tremendous, and it will be effort growing out of nothing more than a flock of paid advertisements.

Therefore on that basis I move to strike this series of advertisements that have just been put into evidence.

The COURT. Your objection is overruled.

You must admit that I doubt if there is a judge in
7361 Christiandom who has ever heard such concentrated advertising talk as I have heard for the last fifteen minutes, so I am going to take a five-minute recess.

(At this point a brief recess was taken.)

7362 We are now down to I–C, your Honor, Exhibits 289 to 297 which commence at page 525. The heading is identification of other flexible packaging materials.

This group of exhibits consist entirely of articles in recognized

trade journals or other governmental sources. In many cases the articles are of governmental or university origin, which we have put here as a group for the purpose of identifying the properties and characteristics of these different flexible packaging materials.

I wish to offer them in evidence at this time, but with respect to Exhibit 289, in connection with that offer I would like to state one qualification.

(Defendant's Exhibits 289 to 297, inclusive, were received in evidence.)

We have put in the whole symposium on packaging materials but we don't offer the material as to cellophane on page 525, the material as to paper cups on 528, the material as to folding boxes on page 530, the material as to corrugated cartons and paper sacks on page 531, the material as to cotton bags on page 532, as to stockinettes at page 533 and as to tin cans on page 535, stating affirmatively that we offer this Exhibit 289 as to glassine and wax papers, as to genuine vegetable parchment and as to metal foil for which there are two articles.

Mr. MINICUS. Your Honor, I think this question has
7363 already arisen on the Government's case in chief. I think it is governed by your original order, that if an article or a correspondence is offered the entire thing should go into evidence and be subject to comment by the other side.

Mr. GESELL. I would much prefer the whole thing. I thought they would object to an article by a duPont man on cellophane. If they want it they can have it. I offer the entire exhibit.

The COURT. I understood your reason for withdrawing was it would patently be a self-serving declaration.

Mr. GESELL. Yes, and inasmuch as we had Government objections on a whole host of grounds of that kind I thought we ought not to offer it. If he wants to have it in, fine.

Mr. MINICUS. I think we should proceed as heretofore, your Honor.

The COURT. I agree with you. I think it all ought to go in.

Mr. GESELL. Fine.

I am not going to discuss these, your Honor, because they are of all our material, the most material in the nature of background material we have, but I do want to call attention to one or two items in the exhibits, the report, Exhibit 291, from the Department of Commerce which begins at page 539, which analyzes the permeability of sheet materials used for packaging from the
7364 point of view of moisture resistance wrapping and packing materials is of, I think, particular interest.

I direct your attention to the analysis of these packaging materials made by the Department of Commerce which appears at page

543 where cellophane, wax papers, other papers, vegetable parchment, glassine of different kinds and different fibers are analyzed by the National Bureau of Standards on the basis of the various tests as to their permeability.

I would like also to call attention to the articles with respect to foil where the properties are analyzed, particularly at page 546.

The COURT. Let us go back to Defendant's Exhibit 289 for a moment. Tell me something about the publication Food Industries.

Mr. GESELL. May I get my reference source on that, your Honor?

The COURT. Yes. What I want to know in short is this: Whether or not it is a publication where various persons engaged in the packaging industry have an opportunity to voice their wares? Is that what it is?

Mr. GESELL. I can say this in a preliminary way, your Honor. Every trade publication from which we have taken an article is a publication which, I understand, is cited by the Department of Commerce as a recognized source for market research.

7365 These are trade publications for different industry groups, Food Industries, such as the magazine is now called Food Engineering.

I have the October 1951 issue, if your Honor wants to see what it looks like.

The COURT. Where does it go?

Mr. GESELL. It goes to the particular users in particular trades. This one is published by McGraw Hill Publishing Company. It is a monthly for $3.00 a year for management and production men in every branch of food manufacture and processing. It reports the new and important developments in all the food and beverage fields.

I am reading from the Department of Commerce of what this particular source is. If you will let us take the excerpts from this Department of Commerce publication as to each of these trade sources we used and set it in the record we would have the indication of the publisher and the nature of each particular publication.

I would be glad to do that, or you can notice the Department of Commerce market research sources for one of these years. It is a regular publication by the Department of Commerce as a guide to information on domestic markets published by their marketing division.

The COURT. Make a point as to pagination and you stoplight that and give it to the Reporter. Put it in at this point.

7366 *Statements in "Market Research Sources," 1950, 9th edition of U. S. Department of Commerce relative to publications containing certain defense exhibits*

Def. Exhibit No.	*Source material*
1, 2, 3, 4, 5, 19, 20, 21, 22, 45, 50, 231, 232, 245, 246, 247, 249, 260, 271, 284.	Bakers Weekly: American Trade Publishing Co., 45th St., New York, N. Y. $3 a year.
60, 97, 175, 241, 255, 257, 289, 290.	Food Industries: McGraw-Hill Publishing Co., 330 W. 42d St., New York, N. Y. Monthly, $3 a year. For management and production men in every branch of food manufacture and processing. Reports the new and important developments in all of the food and beverage fields.
70, 83, 109, 137, 147, 169, 207, 218, 233, 235, 236, 237, 238, 239, 240, 242, 243, 244, 248, 251, 252, 259, 263, 280, 281, 282, 286, 287, 288, 293, 294.	Modern Packaging: Breskin Publishing Co., 122 E. 42d St., New York, N. Y. Monthly, $5 a year. Devoted to new developments in packaging materials, methods and equipment, treated from both technical and nontechnical point of view.
	Industrial & Engineering Chemistry: American Chemical Society, 1155 16th St. NW., Washington, D. C. Monthly, 280 pp., 75¢ a copy, $4 a year. Covers the broad field of applied chemistry. Each issue contains a section on "Industrial Data" giving information about new products and services for the Chemical production and chemical consuming industries.
7367 110	Paper Trade Journal: Lockwood Trade Journal Co., Inc., 15 W. 47th St., New York, N. Y. Weekly. $5 a year. News and statistical information about pulp and paper manufacturing industry.
116	Locker Management Magazine: Locker Management, Inc., 105 S. Ninth St., St. Louis, Mo. Monthly. 30 cents a copy; $3 a year. Information concerning locker plants, construction, operation, merchandising, etc.
134, 250, 264, 272, 276, 283,	Pre-Pack-Age: Miller Freeman Publications, 370 Lexington Ave., New York, N. Y. Monthly. 30 cents a copy; $3 a year. Devoted to the modern methods of producing and merchandising packaged fresh foods. The September 1947 issue contains a complete bibliography of articles, reports, studies, etc., on the subject of fresh food prepackaging.
135	Chain Store Age: Lebhar-Friedman Publications, Inc., 185 Madison Ave., New York, N. Y. Grocery Executive, Edition. Monthly. $3 a year. For buyers and other executives of grocery chains.
152, 153, 258, 262, 265, 267, 268, 269, 275, 277, 288.	Packaging Parade: Haywood Publishing Co., 360 N. Michigan Ave., Chicago, Ill. Monthly. News magazine of the packaging and container field.
7368 170, 264, 270, 274	Good Packaging: Pacific Trade Papers, 210 Mississippi St., San Francisco, Cal. Monthly, $3 a year. Trade paper on packaging, packaging machinery and supplies.

Def. Exhibit No.	Source material
273	Food Topics: Topics Publishing Co., Inc. 330 W. 42d St., New York, N. Y. By-weekly, $5 a year. Magazine publishers annual survey on what the public spends for food and other items sold in food stores. A monthly survey on "What They're Advertising" is included as a measurement of current newspaper advertising in food stores in all sections of the country. The "Next Thirty Days" in this publication is a fortnightly forecast of supply and price conditions in the food field on some 63 items.
256	Western Canner & Packer: Miller Freeman Publications, 121 Second St., San Francisco, Cal. Monthly, $3 a year (includes Year Book Number). Gives news, production, methods and other data on canned, dried, frozen and glassed foods.

7369 Mr. GESELL. I will do that as to each of these trade sources.

Mr. RENNINGER. I would like to point out as to these articles in Defendant's Exhibit 289 you will note that the articles in here on cellophane or wax paper are all written by men from the various companies involved.

The COURT. I so understand.

Mr. GESELL. That is the reason we used it. We thought they would know more about it than people who are not in any of those companies.

Mr. RENNINGER. And also would be biased and would make various claims for their product.

Mr. GESELL. We have included the impartial tests of the Department of Commerce.

7370 Mr. GESELL. Your Honor, the next section, which is the last section in this I-D with reference to "Defendant's Awareness Of The Competition Of Other Materials." It is composed of Exhibits 298 to 334, and I offer this entire group, with the exception of Exhibit 303 which we withdraw.

(Defendant's Exhibits 298 to 334, inclusive, with the exception of Exhibit 303, were received in evidence.)

Mr. GESELL. I think, in a way, coming at the end of this the caption is a bit misleading.

The COURT. I was just about to ask you to explain it to me.

Mr. GESELL. We have been emphasizing the awareness all throughout all the other exhibits. This is sort of a collective point for miscellaneous material that did not fit readily into the industry pattern that we have and it is, of course, prompted by the remarks of Government counsel to the effect that beyond the confines of this Court it was crystal clear that duPont did not con-

sider any of these people competitors and duPont in making this presentation was deceiving.

The COURT. Was doing what?

Mr. GESELL. Deceiving.

The COURT. Who?

Mr. GESELL. I don't know. I hope not your Honor.

At the outset I do want to refer to one of the Government
7371 exhibits, 392, which came up early in the Government's case, to point out that that document is perhaps the lead document for any kind of section of the sort we have.

Your Honor may recall that it is the report of the Development Department of April 14, 1923, to the Executive Committee looking at this cellophane business at the time that duPont was entering into it.

I am not going to read it, but I do want to emphasize here in the record that in that report, beginning at page 7 and running on for a period of 4 or 5 pages, is a sub-section called "Competitive Articles." That appears at page 5435.

The COURT. I would like to look at the exhibit simply to refresh my recollection.

Mr. GESELL. It is 392 and I am referring to page 7.

The COURT. Who is the author?

Mr. GESELL. It is the "Development Department." I believe Dr. Speiry. It was the detailed analysis of all phases of the new business they were contemplating entering. We have discussed it in some detail in the trial, but the competitive article section is at this juncture in our case of particular significance. You see it starting on page 7.

The COURT. I have it.

Mr. GESELL. There is a detailed analysis of what the prin-
cipal competitive products are in the market and what
7372 the competitive problems are going to be from the point of view of price, taking up tin foil, gelatine, wax paper and glassine and showing their extraordinarily low price, and at that time cellulose acetate, and showing from the very outset duPont's awareness that in entering this business it was entering into a business where other materials were established and where it, from the outset, would have a competitive problem on its hands.

The COURT. The date is 1923?

Mr. GESELL. 1923.

The COURT. Yes.

Mr. MINICUS. I submit, your Honor, that that section does not show that as evidenced by the middle paragraph on page 5436. That is the second full paragraph.

The COURT. It seems to me that is a comparison of two products in contradistinction to the use.

Mr. GESELL. Your Honor will see the price comparisons I refer to over on the next page at the top of the page.

Now, with that as a preliminary we have here a group of documents which, I think the best way for me to take up, would be to go through quickly one at a time.

Exhibit 298 at page 570, written, you will notice, in 1924, a very early date, is a letter from the sales manager saying he wants to know the properties of gelatine, glassine, parafine, parch-
7373 ment and tinfoil at an early date, and that is followed by Exhibit 299 where the properties are analyzed by the technical people on page 572 of Exhibit 299. The analysis gives data. The reports says of interest to your sales department. You then will see at page 572 of that exhibit an analysis of this group of materials which were then in the market and it is interesting to note that they are analyzed from the point of view of many of these properties which all our other evidence shows have been continually the properties of importance in this market.

Number one against the product means it has the best rating down to 5, which is the poorest rating.

There is a discussion of the various tests in Exhibit 299 on the page that follows, showing where cellophane was felt to stand as against other materials, and then the reply of Mr. Benz sending the material out, saying he has the material which will prove very valuable to us in the development of our men in the field. That is 1924, your Honor. You tie that together with 392 and it buttons it up as far as the initial situation is concerned.

Then Exhibit 301 is a document which we put in here because of what it shows about the very small participation of cellophane in 1924 in the markets which it now has sales established.

If you will look at page 577 you will notice that it has got some candy business, one dried fruit account, one
7374 soap account, one bakery, your Honor, one drug account and four powderpuff accounts; no meats, no snacks, no produce and no cigarettes.

The COURT. Yes, you have cigarettes. You have two.

Mr. GESELL. On the next page?

The COURT. Right.

Mr. GESELL. You are right. A very limited participation in the markets compared to what the situation is today.

Then you will see in Exhibit 302 in 1924 still another technical report. It states, "We have made some preliminary observations to learn how much weaker competitive products are than cellophane." And you see listed as the competitive products glassine, parchment paper, tinfoil and German cellophane.

7375 The next exhibit is one I did not offer.

304 is a document from Benz to Dr. Pickens about the

Beech-Nut account, in which he reports, in about the fifth paragraph, that they want tests made with respect to the best waxed paper, and you will see their letter, which is 305, which was attached to this Benz 304, in which Beech-Nut says to Du Pont, "Your new moistureproof cellophane does not begin to compare with our best waxed paper for moistureproof qualities." And he suggests that the laboratories confer.

Then you see a detailed report on the moistureproof problem—this is in 1930—by Dr. Charch—that is Exhibit 306. This is an exhibit of some considerable interest in which he analyzes the situation as against glassine, points out that the salesmen have to be careful in over-stating the moistureproofness of cellophane as against waxed papers and glassine. The most significant portion from our point of view begins at the bottom of page 3, at 589, and continues to the end of the letter, in which he reports that they found several waxed papers which were practically on a footing with moistureproof cellophane and speaks about the research developments that are taking place in waxed paper to meet the cellophane developments.

We now have one early document here in 1930 which picks up the fact that glassine papers are used on packages like Lucky Strikes, a matter that was covered before, and I call your attention to the third paragraph of that letter—this is an
7376 internal Du Pont document—"We are advised that the price is 55¢ per pound which is the highest price glassine we have come in contact with, and this price is so much closer to Cellophane's than other glassines, that its sales will be correspondingly retarded, we believe.

"It is an indication, however, of the interest and desire of the paper manufacturers to improve the quality of their so-called transparent papers, and there is no question but that they are lending every effort toward this end."

Then we come to the next document which is the beginning, your Honor, of I think a rather significant story which we have developed here and which is lurking in the Government documents but not developed, and if I may take a moment before dealing with the document beginning at 308, I think I can sketch briefly what the story was.

Riegelite, a paper and glassine manufacturer, developed a very much improved and efficient paper. It was lacquered and moistureproof and it disturbed Du Pont very much—

The COURT. Are we going to have physical exhibits of these various products?

Mr. GESELL. Yes. I don't know whether we will have of this glassine back in '31 but of the types there are in the trade in recent years, your Honor, yes.

But here was a new glassine, a very efficient paper, and the problem came up, what was Du Pont going to do about it?

7377 It was a competitive development of real concern.

The matter went to the attention of the sales people and development people and a suggestion was made that maybe Du Pont should combine with Riegelite and see if between them they could not really develop this business for themselves—

The COURT. You do not mean a legal merger of the companies?

Mr. GESELL. No. I mean a coming together of technical and other cooperation, as you will see.

That was discussed and vetoed.

Then Du Pont considered, maybe they ought to get out of the cellophane business and go into the business of manufacturing papers, because, by George, with these developments coming along they could not perhaps keep pace unless they became a paper manufacturer. And then that was discarded and the policy was settled by Mr. Yerkes, who said, "We are going to make cellophane. We can expect other people to compete with us. We have got to go ahead and compete with glassine, and we are not going to do anything to make it difficult for glassine to compete with us. If they want lacquers from us, they can have lacquers from our Fabrics and Finishes Department and if they want licenses under our cellophane moistureproof patents, they can have them so they can coat their glassine and compete more effectively." And we gave them the licenses.

So there you see at this early stage, in an incident

7378 to be sure, a whole series of facts entirely opposite from the contentions that are being advanced from the Government table.

Mr. MINICUS. Do I understand Mr. Gesell to say they licensed Riegel to coat cellophane?

Mr. GESELL. Well he heard what I said. I said they licensed them under those patents and they coated their paper—they weren't making cellophane; they were making paper.

The COURT. It was under the Du Pont lacquer patent.

Mr. GESELL. And under the moistureproof patents that we have been talking about in this case.

Mr. MINICUS. I understood there was an express reservation in there that they would not coat cellophane.

Mr. GESELL. Sure they were. I said they licensed them to coat their paper so they could compete, and they did license them. They were not making cellophane; they were making paper, as Mr. Minicus can find out if he reads the exhibits.

Exhibit 308 is the first of them, your Honor, and that is a letter from Mr. Benz to Gladding, in which he calls attention to this new glassine, and he says that cakes are wrapped in it and

when you compare them with the cake wrapped in cellophane the comparison is not discernible to the average person.

He says at page 593 of this exhibit 308, "There is no question but under present day conditions, and the desire on the part of the average manufacturer to sell his product for less—if he can secure an economical packaging material which will
7379 serve his purpose and maintain his sales, he will make a change."

He goes on in a latter paragraph and says, "Incidentally, it is claimed the moistureproof and heat sealing qualities of this new Riegelite are much better than anything on the market at the present time and very comparable to Moistureproof Cellophane permeability factors." Moistureproof was not heat-sealable at that time—it wasn't until '33. And he says, "From the heat-sealing point of view it is very much of an improvement than Moistureproof Cellophane."

Then note this, your Honor. This is when cellophane is selling at 70¢ a pound: "The product is sold at 17¢ per pound and has an area factor, to the best of our knowledge, of slightly better than Moistureproof Cellophane."

The COURT. I did not get that last statement. Would you mind reading that to me?

(The Reporter read the following:)

"Then note this, your Honor. This is when cellophane is selling at 70¢ a pound: 'The product is sold at 17¢ per pound and has an area factor, to the best of our knowledge, of slightly more than Moistureproof Cellophane.' "

Mr. GESELL. In other words, here is a glassine selling at 17¢ against our 70, with no discernible difference to the public eye and with excellent qualities.

Then here comes a report from Mr. Yerkes to Glad-
7380 ding of the Technical Department in Exhibit 309 in which he says, "This stuff looks very serious to me." And he analyzes it and says, "Incidentally, we have already lost in the baking business somewhere between 30,000 and 50,000 pounds per month, as nearly as we can judge." So you see the competitive effect, and he asked them to look at their patents and see what could be done about it.

Then comes Gladding's suggestion that Riegelite is a very progressive company and they are developing tight transparent wraps, and he says the developments are such that we think we ought to get together with them and talk about this matter and see what we can do about it. They are an outstanding firm in paper technology.

Then there is a letter from Riegel to Du Pont Company in which he says, "We are naturally interested in developing as

wide a market as possible for our glassine paper, and in that connection have done considerable experimenting on the coating of it. It would seem possible that your patented moistureproof coating might be ideal for the purpose." He wants to know whether any arrangement can be made.

Then the competitive report of that year in 312 reports that this Riegel development is the outstanding competitive development.

Then we come along, if I may skip in the grouping of the exhibits, to the letter of Mr. Yerkes, which establishes
1381 the policy on this matter, and that is Exhibit 323, which I would like your Honor to look at. It is at page 616.

He replies and he says to Gladding, "I quite thoroughly disagree with your position."

He goes on later and he says, "My own belief is that the Du Pont Company will definitely decide not to go into the paper business, either alone or with anybody else, but will decide to sell any lacquers, sizing or finishing materials that they make to the paper trade."

He says, "I don't see any reason for attempting to put Cellophane in a glass case and stop everybody from throwing bricks at it. Nor is there much possibility that we could develop a transparent paper which would at the same time protect Du Pont Cellophane and be better than any that the hundreds of paper manufacturers would be able to develop.

"We are not going to be able to stop paper manufacturers from attempting to make a substitute for Cellophane, nor in my opinion are we in a position, even with the Experimental Station's help, to do this job as well as the paper people themselves could do it."

He goes on, "I am in favor of spending research money to the nth degree on the improvement of Cellophane and on reducing the cost of manufacturing Cellophane, and I am also in favor of what I think we will decide to do—let down the bars for Bill
7382 Richter—" that is, the Fabrics and Finishes Division—"to sell any lacquers or other materials that he wishes to the paper trade."

Then the Government evidence shows the license was granted, the royalties paid, and the lacquers sold.

So here is a situation where you get not only the awareness of the competition, and it is strenuous competition, but you get a clear indication of Du Pont's willingness and recognition that there is to be competition, a refusal to join up and a refusal to use any of its lacquers patents to stop the competitors from competing. It is all entirely inconsistent with the Government's claims.

Then, if your Honor please, I would like to call attention to one other document which bears on the nature of this competition, to show that what was involved was not merely a worry but an actuality. You may take a look at Exhibit 315 at page 601 for a moment, without reading all of it, and just glance down those columns, and you will see there a summary, an analysis, in 1932, of the competitive experience with this new film. And you could throw a dart against this document anywhere and whatever paragraph it would hit it would support our contentions clearly and concisely. Everywhere you see evidence that accounts were lost, this material was superior, it was cutting in to the business, they analyze it by different grades, by different areas, and you see a consciousness, to say the least, of the severe competition
7383 which this glassine is producing, with big accounts and small accounts. This is a compendium, a review prepared at the time of the extent of the competitive inroads which were being made which very much concerned the Company in its competitive fight in this field.

Then there is another document, your Honor, a pair of documents, which I would like to mention, 313 and 314. Mr. May writes to Mr. Ward, whom you will note is the Du Pont Comptroller in 313—this is in 1932—and a reply comes back in the next exhibit, and this was a rather interesting question presented. The cellophane people are conducting research into whether or not they could manufacture a paper, and the problem presented is how that research expense should be charged. If it involves going into a new line of business, then it would be chargeable to undistributed expense. If it doesn't involve going into a new line of business, then it is charged to cellophane expense. And Mr. May asks the Comptroller, "How are we going to handle this? We are investigating a cheap moistureproof film or coated paper because of the competition angle. How are we going to be able to charge this? To which account?" And the Comptroller says, "You are in the business of making wrapping papers and this is just the old stand. You just have a different kind of business, and you can't charge this as a new line of business to undistributed expense."

The COURT. Mr. Ward pretty well states your theory of the case, does he not?

7384 Mr. GESELL. Yes—in 1934 or '32—which is it?

The COURT. '32.

Mr. GESELL. The other documents relate to the developing competition of pliofilm in particular, and I am not going to take the time to discuss them in detail.

I want to emphasize again to your Honor that we hope to fill in these documents with other proof. We have tried, I must say against rather considerable feelings to the contrary, to keep it

small so you can get your hands around it. This is a sampling of much material that could be brought forward.

The Court. Mr. Renninger, so I may be able to follow you, will you turn to the index, which covers both Volume 1 and Volume 2 and tell me where you are going to start your comments. Didn't you make some comments with respect to some of the matters discussed yesterday?

Mr. Renninger. No, sir.

The Court. You have not covered any of them?

Mr. Renninger. No, sir.

If your Honor please, my comments will be more of a general summary nature in the beginning, pointing up various passages in various documents that Mr. Gesell very conveniently did not comment upon.

The Court. But you will have as your starting point I-A-1?

7385 Mr. Renninger. Yes, sir.

If your Honor please, in the course of these two days, or a day and a half approximately, over three hundred documents, covering some six hundred pages, have been presented as evidence to this Court, and periodically punctuating this presentation has been the rhetorical question: "Is this competition or isn't it?"

It is the Government's sincere contention that a definitive analysis of this material absolutely precludes the possibility of arriving at any satisfactory answer to the questi posed.

Let us for a moment, your Honor, focus our attention on the over-all picture of just what type of documents comprises the vast bulk percentage-wise of this material.

Approximately 42% of these documents are trade reports and approximately 23% are advertisements—or, in other words, just shy of two-thirds, 65%, of the basic material which must form the structural foundation upon which this rhetorical question balances—awaiting its answer by the Court—are a combination of the ever-imaginative and exaggerating minds of advertising copy writers and the sketchy reports of salesman John Jones, who didn't meet his quota last month, excusing his performance by relating that Paul Peters says Bob Brown believes cellophane can't hold a candle to wax paper or glassine.

It is rather amusing, your Honor, for when the Govern-
7386 ment first started this investigation of the cellophane industry a number of years ago, there was at least one striking and basic conclusion, which it felt was very safe to reach. We all thought that cellophane was a pretty good product—as a matter of fact, the Du Pont people kept telling us that it was a terrific product, and written statements by people who certainly ought to know

told us that people like Carpenter, Yerkes, Brandenburger, May, Charch and right on down the line to the man in the street who said he likes to see his cigarettes in a shiny, smooth cellophane wrapper told us that cellophane was tops.

But now, here in 1951, we have Du Pont's own advocates for a day and a half reversing their field and refuting the logic of twenty-six years of top executive statements, and on what? Why, on a report of what John Jones, a salesman, said.

Now, your Honor, doesn't it seem strange that although this documentary presentation stretches out chronologically for a period of over twenty-five years, a quarter of a century, that it is marked by a conspicuous absence of market surveys, competitive forecasts and other like finished products?

This is the section on the defendant's conception of the market—competition is the issue—we have before us 141 trade reports and
77 advertisements for which we are asked to infer competi-
7387. tion. Now, if these reports accurately reflected a cross-section of the market situation, wouldn't it be likely that the sales department or some other department of the company would compile and correlate this information into a finished product such as market surveys and the like which might form the basis of reports requesting action by executive authority?

Of course, your Honor, if these 141 trade reports were isolated ones, if they represent but a small fraction of the number of trade reports which report diametrically opposite activity, namely, a lack of competition, then of course in the process of correlating these saleman's reports into finished working surveys, these isolated ones will be lost in the shuffle and the surveys will be void of competitive problems.

The COURT. Were you in the case, Mr. Renninger, prior to 1947?

Mr. RENNINGER. No, your Honor.

The COURT. Do you know the answer to the following question: When you had access to Du Pont's documents and records, were all the other trade reports to which you have made indirect reference available to you?

Mr. RENNINGER. I am not sure, your Honor. Mr. Minicus perhaps can answer that.

Mr. GESELL. I can answer it.

The COURT. All right, answer it.

Mr. GESELL. They were available and the Government
7388 has never looked at them and never wanted to look at them.

Mr. MINICUS. Being the one who made the investigation, I can explain both answers to that. I didn't realize Mr. Gesell was in the case at that time either.

Mr. GESELL. Well, I was, and I think it might be very interesting to note that even in the last discovery when I raised this question, that there were thousands of these, the Government said they didn't want to look at them, and they didn't. They are there and they can look at them any time.

Mr. MINICUS. I thought Mr. Gesell was protesting that it would be too much of a burden to read them. About this question of the original discovery——

The COURT. The implication Mr. Renninger is making—the impression I got is that these documents which I have looked at and heard about for a day and a half now were hand-picked specimens, and that is the charge he is directing at Mr. Gesell, and I want to know, if they were hand-picked, were the other records available to you, whether you hand-picked your own?

Mr. MINICUS. I haven't said they weren't. I am willing to say probably they were. We just didn't know they were there. We never asked for them.

The COURT. All right, proceed.

Mr. GESELL. I will put a witness on with respect to that if there is any question. They were discussed in detail and there was correspondence on them. They have known of their
7389 existence from the very beginning and they don't want to see them.

The COURT. I have no further inquiry about the matter.

Mr. RENNINGER. That brings us to the most important criterion of weight that should be given to this type of evidence which has just come in. We must remember that selectivity has been an instrument entirely and exclusively in the hands of the defendant. This is not the Government's issue; it is the defendant's. Whether they admit it or not it is in the nature of an affirmative defense and as such it must stand or fall.

We don't know how many salesmen this vast company has employed over the course of twenty-five or twenty-six years, and we don't know how many thousands or perhaps hundreds of thousands of trade reports they submitted to the front office. But one thing we are sure of is that we have here 141 of their trade reports, which evidently have been carefully screened from the total mass before presentation to this Court, and we are certain that these represent but a small percentage of the number that must evidently wholeheartedly deny competition. And the Government at this time would like your Honor to entertain a caveat in regard to this entire section of proof, for as you know the plaintiff's evidence on this subject has not yet been presented but we can assure your
7390 Honor that when such presentation is made there will be statements which categorically deny competition of any

shape, size or form in regard to cellophane. And, your Honor, as has been the Government's custom throughout its entire case in chief, these statements will be those of top management officials, departmental heads and section chiefs and not the isolated hearsay gossip of the market place.

Now, your Honor, with those broad caveats in mind, let us take a typical section of the defendant's presentation and see how wide is the gap between the facts and the inferences drawn by counsel.

By virtue of the defendant's own argument, Section 1, the Baking Industry, concerns the most important end use for cellophane and as such has received the most detailed treatment by the defendant. This being the case, it cannot be too far from logical to assume that the defendant's proof must be at its strongest here and if this section falls factually, so must all the others be dragged down with it. So let us direct our attention to this Section 1. We see that it offers a crystal-clear picture of the smog and confusion which has been cast over the real issues by skillful presentation of selective evidence.

The so-called competitive activity in the baking industry begins on January 5, 1924, and stretches to January 4, 1950—a period of exactly twenty-six years. As factual data from which the Court is asked to draw the inference of competition, the defendant
7391 has presented 71 exhibits in the baking industry. Of these, 12 are advertisements which by the defendant's admissions are not offered testimonially and thus we see that in this entire section only 59 documents are offered for the truth of what they say. Of these 59, 33 are trade reports. In other words, 55% of the testimonial documents are individual salesmen's reports, the general weaknesses of which we have already pointed out. And now to the real confusion of the issue——

Your Honor will remember that counsel for the defendant laid great emphasis here on the cost differential between wax paper and glassine on the one hand and cellophane on the other. He pointed out that the trade reports of the salesmen stated that glassine was far cheaper and wax paper was cheaper and cellophane was at a disadvantage in those fields where there was a very low margin of profit. In other words, cost was the big factor. In the words of defendant's counsel referring to Defendant Exhibit 27, and I quote, "But in the low priced items where presumably his margin of profit is small, he has thrown cellophane off because it costs too much."

And quoting from Defendant's Exhibit 33, "Above is still cost minded. Claims he pays 8¢ a pound for wax and 58¢ a pound for cellophane, out of line."

And so on go the reports—cost, cost, cost. But just a second, your Honor. Let's take a look and see when these reports were

dated. Defendant's Exhibit 27 is dated February 26,
7392 1932; Defendant's Exhibit 33 is dated March 20, 1933.

Now, that is an interesting date, your Honor—just two weeks to a day before that a very interesting event occurred—all the banks closed on March 4, 1933, and this country was in the throes of the most devastating depression in its history and cost was the by-word of any trade.

Now, your Honor, isn't it a bit strange that of the 33 trade reports which comprise 55% of the testimonial evidence in the baking section, 15 of these, almost half, were written in either 1932 or 1933? Isn't it strange that when the period of so-called competition here stretched over more than a quarter of a century that better than 40% of the trade reports presented are dated during the dark years of 1932 and 1933? Isn't it strange that 25% of the entire documents in this section, 18 out of 71, are dated 1932 or 1933? It is not so strange, I guess, your Honor, when emphasis on cost is what the defendant is trying to prove. Of course, cost was the issue in 1932 and 1933. There were breadlines on every third corner and the consumer wanted food, bread, not a fancy wrapping material around the food. They could have wrapped bread in burlap in those days and people would have scrambled for it. But what about the other twenty-four years in this period? What are the facts for those years?

7393 So now, perhaps, the pretty portrait of competition begins to lose its clarity. We have seen that of the 33 trade reports offered for this period 15 were written in 1932 and 1933. What about the remaining 18?

Now, I don't want to belabor the point, your Honor, because we have made it before but we can't pass this opportunity to mention that of these other 18 reports 13 were written during the post-complaint period, at a time when all duPont salesmen were fully cognizant of the then pending monopoly suit. We ask your Honor, what is their guaranty of trustworthiness?

Thus, for this section of proof we have seen that of 33 trade reports, comprising 55 per cent of the testimonial evidence, available to the Court here, 15 of those reports are tainted because of their origin during the depression and 13 because they are post litem motam declarations. I believe that leaves just 5 reports for this section, which do not lend probative value on their face. Are 5 trade reports a reliable factual bases upon which your Honor is to infer competition in this most important Baking Industry for a span of 26 years?

As I stated, your Honor, I would like to point out a few statements made in various of the Defendant's exhibits that have been introduced into evidence and point up what we think are things that should be considered.

7394 The Defendant's Exhibits 6 to 16, inclusive, upon which Mr. Gesell seems to have laid such great stress, are early documents written in 1927 and 1928. Of course, we admit cellophane had not been perfected at that time.

The documents show various tests made by duPont or others on moistureproofness of duPont's early so-called Moistureproof Cellophane and complaints of various companies that it was not. The documents show cellophane was replacing glass jars, boxes, and glassine on cookies and fruit cakes.

The tests in those days were not adequately described. The tests gave a variety of results and in various instances the officials of duPont thought the tests by the third parties wrong.

New products are always subject to imperfections. Experience proves a product by trial and error. A new product has to be perfected.

These documents, principally trade reports, as we have discussed them before, are all replete with hearsay. There is no description as to how the tests were made and the contrary results obtained were brought out.

Defendant's Exhibit No. 18, dated in 1928, was an extract of the use of cellophane in the cake baking industry. The report is stated to be the results of a duPont salesman's survey in the field, and covered certain bakeries in certain cities. Although the
7395 document is replete with hearsay it does show the importance of eye appeal and impulse buying. The document states that approximately 90 per cent of all cakes bought are bought through the appeal to the eye or by impulse.

Defendant's Exhibits 19, 20, 21 and 22 are all ads. There are three for Riegelite. The ad from Package Machinery Company recognizes distinctive features of cellophane in saying: "You can use cellophone for its greater sales appeal, glassine or waxed paper."

Defendant's Exhibit 23 is a report of interviews with 27 grocers selling Ward's cake. No signature, no addressee, not identified as coming from duPont's files. The survey was very incomplete and general, but the opinion is expressed by dealers that boxes ought to be done away with and that crullers would sell better if wrapped in cellophane.

Defendant's Exhibits 24 to 29, inclusive, written in 1931 and 1932, are all duPont's salesmen's reports. Most of them are isolated reports, usually just one for each company. These documents don't tell the full story or what occurred before or after the report in question. Many are hearsay on hearsay. These reports show competition with Sylvania. However, these reports also bring out again the importance placed on protection, visibility, appetite appeal, quality touch and better display in retail stores.

These documents point up the importance of using cello-
7396 phane on specialty items and better priced items, and point up quality of the product and the part cellophane is playing in stimulating buying impulse.

In Defendant's Exhibits 32 to 42, inclusive, another group of trade reports, replete with hearsay, and hearsay on hearsay. They are practically all isolated reports, one or two from each company. They don't give a true picture. These documents are really documents, when cellophane was still in its development stage and still in the carriage trade.

These documents also point up the use of cellophane on quality items. In one instance the company used waxed paper on small cakes as a seasonal item, as it was stated that the company did not care to build up a permanent business in this line. The documents also point out how cellophane would stimulate sales and the important of true visibility such as found in cellophane. Another describes how restaurant products are put up in boxes. It is obvious that eye appeal is not important in such a sale.

Defendant's Exhibits 46 to 49 and 51 all relate to various experiments conducted in most instances by the duPont Cellophane Company on the value of cellophane as compared to other wrappers for the wrapping of various cake products. In most instances, no adequate detail is given as to how the tests were conducted or under what conditions, and the documents are
7397 replete with hearsay and are of very little probative value.

Defendant's Exhibit 47 concerns a test made by duPont to prove the fallacy of a test made by the Ward Baking Company as to Ward's claim that Riegelite was a better wrapper than cellophane on pound cakes and certain cookies. DuPont was principally interested in developing types of film to meet and overcome any deficiencies shown in cellophane. The tests made with various types of softener on cellophane to get a good cellophane product for wrapping cakes. This experiment merely points out that any product can be improved to meet certain needs in certain fields.

Defendant's Exhibits 53, 54 and 55 are the usual trade reports of the duPont salesmen replete with hearsay. The last two reports concern the Ward Baking Company and are carefully chosen by the defendant out of evidently hundreds of interviews that the duPont salesmen had with the Ward Baking Company. Here again the reports point out the distinctive features and unique characteristics of cellophane, the importance of complete visibility and better protection afforded by cellophane and that Ward must depend upon appetite appeal through visibility to sell its products, and as the duPont salesman states, "There is no compromise with cellophane."

Defendant's Exhibit 56 is a duPont information bulletin from C. F. Brown, which is in the nature of a pep talk or sales talk. The writer stresses the importance of transparency
7398 and the better protection afforded by cellophane. The statement is made that with cellophane the independent bakers have the ability of letting their products appeal to the housewife when she buys so that she will not be taken in by the advertisements of the big companies. The statement is also made that 35 per cent to 40 per cent of the bakers' business in variety loaves had been built up on cellophane because the consumer wanted it.

Defendant's Exhibits 58 and 59, written in 1948, have not been stressed particularly, but they point up the fact that cellophane is now on allocation. duPont cannot make enough of it to supply the demand, the demand for cellophane. Does this look like duPont is having a hard time selling cellophane?

The COURT. Did all these other persons we heard about in the last day and a half that have been engaged in the packing industry, have they gone out of business?

Mr. RENNINGER. No, sir, different fields and different uses.

Defendant's Exhibits 61 to 69 and 71 to 73, inclusive, are all trade reports, isolated reports, on one company only. Here again the article shows the distinguishing features of cellophane, the importance of transparency and that cellophane is far superior from a functional and merchandising point of view. It is
7399 only when transparency is not so important, as in an overwrap for a box, that glassine or other papers are used.

Defendant's Exhibit 70 is an article in "Modern Packaging," written in 1949. It appears to be an article written by an individual on the basis of various statements made by various concerns concerning their claim as to the value of each one's respective products. The article is replete with hearsay statements and quotations.

It is interesting to note that, according to the author, a duPont survey showed that 40 per cent of all bakery goods sales are decided in the store; 67 per cent of cakes and cookies and various other percentages of rolls and breads are purchased on impulse after seeing the baked goods on display. The article points out the desirability of transparent wrappers where the consumer can see the product, the only exception being white breads where visibility is not important. The article points up the importance of cellophane as the preferred wrapper for specialty breads.

Defendant's Exhibits 90 to 96, inclusive, are more du Pont salesmen's trade reports, the usual type, replete with hearsay and usually dealing with isolated situations. However these docu-

ments do show the importance of consumer acceptance of cellophane and the added sales appeal of cellophane. These documents also point up another fallacy in the defendant's argument as
7400 we are here dealing with converted items and not dealing with the product, cellophane, as it leaves the manufacturer's hands. As examples, defendant's Exhibits 92 and 96 show the importance in printing in the end use of the product. The finishing of an attractive wrapper or a printed wrapper is part of the converter's function.

Defendant's Exhibits 98 to 104, inclusive, point out the importance of the specialty uses of cellophane.

The Government admits that cellophane, due to its inherent, peculiar characteristics, is not adaptable to all packaging uses, but these documents show that in the trade cellophane is recognized as a separate, distinct product, having certain distinct characteristics.

Defendant's Exhibit 105 is a letter that gives results of tests on moistureproofness of cellophane as against vegetable parchment. The tests show cellophane lets only 1/37th as much moisture to escape as does parchment paper. There is no indication as to how the test was made, who made the test or whether the test was complete.

Defendant's Exhibit 106 is a letter from W. H. Charch to Clarence Birdseye, enclosing the duPont data taken from various tests as to vaporproofness of various papers as against M. P. cellophane.

The writer there claims only a few grades of wax paper have the same moistureproofness as that of cellophane and these
7401 are curiosities. This letter evidently is the basis of Birdseye's article in the next exhibit, in which he expresses the fact that the M. P. cellophane is completely transparent and has high resistance to passage of moisture vapor and other gases.

Defendant's Exhibit 110 is an article in "Paper Trade Journal" on Moisture Vaporproofness. The writer claims a wide variation in each type of material for packaging, and that it was impossible to test all wrapping materials. Cellophane held up very good on all tests. Parchment papers or waterproof but not water vaporproof waxed paper absorbs water and will tear very easily when watersoaked. Water vapor transmission of most cellophane very high.

Defendant's Exhibits 111 and 112 are salesmen's reports again but point up certain important considerations. They relate to two calls on a fish company using both cellophane and parchment as wrappers for frozen fish. The company got a premium for the fish wrapped in cellophane. Cellophane was selling the frozen fish best. It points up the importance of cellophane as a special quality or premium wrap.

Another article in Defendant's Exhibit 114, written in 1949, discusses the moisture permeability in packing and wrapping material for frozen foods. As to foil, the writer says that foil is not good to use as it is easily punctured and difficult to write on. Laminating does not cure defects as skin tight features are lost.

7402 Here the author states that as to the frozen food industry tin cans are the best containers.

Defendant's Exhibit 116 is a reprint from "Locker Management" as to what the better wraps were. The article states that plain foil lighter than .001 is not desirable for wrapping because of pin-holing. In the price study of it, we will see later on, the defendant uses a much lighter foil .00035 as a basis for a foil that is used for wrapping purposes.

Defendant's Exhibit 119 points up how the end use market is separate from the manufacturing market. This exhibit shows the competition between two converters, Milprint and Shellmar. Another exhibit, Defendant's Exhibit 123, shows how one company changed from cellophane because the company was dissatisfied with the type of service rendered by the cellophane converters. These documents also show the distinguishing characteristics of cellophane as to its qualities and uses, the importance of visibility and the peculiar features of cellophane that would cause a company to put two packages out of every box of 24 in cellophane to let the customer see the product. Other documents point out the eye appeal, impulse value and cleanliness of cellophane.

7403 Defendant's Exhibit 145 was an experiment conducted on the use of the cellophane and foil for the packaging of potato chips. The results of tests showed that only a glassine lined foil back could give the moistureproof protection that could compare with that secured with cellophane. This experiment points up the necessity of using a laminated foil to be at all effective as a package.

Defendant's Exhibit 147 is an article on modern packaging. The author there claims that the best carton for potato chips is an inner bag of waxed glassine and an overwrap of pliofilm. The article, however, points up the importance of transparency and the fact that pliofilm cannot be used in machines which ordinarily sealed cellophane and other products.

The advertisement at the bottom of page 317 also states that pliofilm is not available during the five World War 2 years. Here is another instance, Defendant's Exhibit 149. The man interviewed there said that cellophane as used on Fritos was too moistureproof and it traps off odors and moisture.

The Alcoa ad, Defendant's Exhibit 153, stresses the so-called superior features of aluminum foil, and the ad describes how the

leading packaging manufacturers have had wide experience in developing packages using Alcoa's aluminum foil. Here again we see that we are not dealing with the manufacturers' level, but the converter's level.

Defendant's Exhibit 154 to 164, inclusive, the usual
7404 Du Pont salesmen trade reports, replete with hearsay and opinion statements, it is interesting to note that when a particular company, as in Defendant's Exhibit 154, talks of a cellulose acetate window in a carton, the Du Pont salesmen talks of the superiority of Du Pont's cellulose acetate. Here again we are dealing with another item and another product. We are not dealing with products on the manufacturer's level, but on the converter's level.

Defendant's Exhibit 183 in 1940 describes a Du Pont experiment on Ginger Bread Mix. The test involves a cellophane bag as contrasted with a printed foil-wrapped laminated on the outside of a cardboard box, the contents being held by a greaseproof paper bag. Under Mr. Gesell's definition I guess he would consider that is in competition with cellophane.

Defendant's Exhibit 184 to 186, here for a change we have three trade reports dealing with one company, although it only covers a short period of time. These documents describe a claim of the company against Du Pont in which the claim is made that their package of cellophane was continually breaking. Du Pont at that time states quite clearly that they are not in a position to guarantee the performance of cellophane due to countless factors they were not familiar with nor controlled.

Most of these documents are dealing with the converted item, the item that Du Pont does not control.

Mr. GESELL. If that is a concession, and this is the
7405 third time we have had it, is it the Government's contention that there is no monopolization of converted cellophane and no monopoly of conversion? It was charged on their case several times that there was, and we are amassing proof to meet the issue, and if Mr. Minicus' concession of yesterday is to be made by Mr. Renninger today again we can have it boiled down once and for all and we can cut out a lot of proof.

Mr. MINICUS. There is no concession. There is nothing difficult about this problem. When Du Pont sells cellophane to the converter it is within the sphere of the monopoly. When a converter sells it to the user it is outside the sphere of the monopoly. We are not charging any monopolies by converters. We are not charging that any converters fixed prices. We do say here that once a converter buys a piece of cellophane, plain cellophane, unprinted, uncut, and completely writes all over it with printing, sometimes

so that the transparency is gone, puts his own price on it, the appearance of that cellophane and the price of that cellophane in the sale to the ultimate user by the converter is not inside this case. We are talking about cellophane here. That seems quite plain. These trade reports often refer to what happens to converted cellophane. That is all Mr. Renninger is saying. Converted cellophane in the market as between the converter and the ultimate user is beyond the scope of this case.

7406 Mr. GESELL. May I ask another question and get it clear? Does that equally apply where the user converts himself? Because your Honor appreciates that either the conversion is done by a middleman or is done by the user himself.

The COURT. Take the Atlantic & Pacific Stores.

Mr. GESELL. Yes, they are a converter. There is no charge whatever here made as to our sale to them.

Mr. MINICUS. Of course there is. The material sold—I don't know why this is so esoteric. The material sold to them is unconverted cellophane. They are in the market. The A & P Store is in the market——

The COURT. Suppose A & P says to Du Pont, "We think glassine has a better product than yours for the following reasons, A, B, and C." Du Pont says, "Well, we have to meet those reasons." You say that the sale to A & P is within the monopoly?

Mr. MINICUS. Certainly; certainly.

Mr. GESELL. But he says that if a converter who we go to work with to make a better bag sells to A & P, that is outside the monopoly.

Mr. MINICUS. If it is a converted bag that A & P is buying at that stage, yes.

Mr. GESELL. That takes out of the case, then, 35% of our production right there.

Mr. MINICUS. My goodness, your Honor, let me——

The COURT. Don't be so desparate, Mr. Minicus.

7407 Mr. MINICUS I can't understand how that takes out 35%, when that 35% had to be sold to the converter.

Mr. GESELL. I would like to get this straight. I am not trying to confuse it; I am trying to clarify it.

The COURT. I have to have clarification.

Mr. MINICUS. Your Honor, all we are talking about here is unconverted cellophane. The charge is that unconverted cellophane is monopolized. If we were in aluminum and were talking about virgin aluminum we would talk about pigs or sheets, however aluminum came out, and could very easily exclude pots and pans.

Now, when a sheet of cellophane is sold to a converter it is sold primarily as a sheet of cellophane; it is nothing else. But the

converter may take it and he may completely cover the outside of it with printer's ink so that the transparency is gone. He may then fold it into a bag. He may arrange for some sort of a solvent or something that will cause it to stick. When he sells it he sells it as a printed, nontransparent, sealable bag. We are not charging monopoly of that bag. We are charging monopoly of the sheet of cellophane sold to the converter. If it were aluminum we would not be charging monopoly of the pot or the pan or the screen or whatever it was converted into. We are charging monopoly of the unconverted item, and when they bring these converted items here they are outside the scope of this case.

7408 How can Mr. Gesell possibly claim that when we say that this converted item is not in our case it takes 35% of the cellophane out of the case when that cellophane had to be sold to the converter in the first place? There are two levels in this market here and we have made that quite clear in our own presentation. There is the indirect sale; that is, the sale of cellophane manufactured by Du Pont to the converter. That will be converted later and pass into another market. But there it is in the cellophane market, and that 35% that Mr. Gesell is talking about is right in there.

The COURT. Let me ask you this question: Is it the Government's theory that Du Pont has no competition in selling to converters?

Mr. MINICUS. No. That Du Pont has no competition in selling to converters?

The COURT. That is right.

Mr. MINICUS. Certainly not from these other products.

The COURT. I don't understand that answer.

Mr. MINICUS. Well, Sylvania is in the market. To whatever extent the smaller manufacturer is able to compete with the larger, there is competition to the converter.

The COURT. Is that in the case? Are sales of Du Pont of cellophane to converters within the charge of monopoly as alleged by the Government?

Mr. MINICUS. Certainly, your Honor. We have at great
7409 length showed that Du Pont has monopolized these marketing outlets which were the converters. We have shown the exclusive agreements with Milprint, Shellmar, Dobeckmun, Humitube, Nashua, and many others whereby they could not buy their cellophane from anybody else but Du Pont.

The COURT. I am not talking so much about cellophane per se as the use to which the converter puts the product. In other words, are people in competition with Du Pont when they sell to the converter for the converter's particular use; that is, glassine and wax paper?

Mr. MINICUS. We say no. We say no because the converter is purchasing the cellophane for a particular market that he will sell to, and the converter's customers' market governs what the converter wants there. But that market that the converter will sell to is a completely different market than where he buys wax paper and sells it to another type of user. But when you get to the level of the converter sale then we are outside the scope of this case.

Mr. GESELL. Mr. Minicus has of course charged differently in his complaint, but we departed from the complaint a long time ago.

Mr. MINICUS. I would like——

Mr. GESELL. And you are aware——

Mr. MINICUS. I would like to know where I departed.

Mr. GESELL. Paragraph 20 on page 26 of the print.

7410 You charged us with selling through jobbers, agents, fabricators, and converters, and that was what I was about to amplify on. We sold converted cellophane by encouraging and stimulating the sale of converted cellophane to the same people we sold to direct, and that is recognized in your complaint and is recognized in all your evidence, and now we have a different foot.

Mr. MINICUS. Your Honor, it is very simple. Du Pont does not sell any converted cellophane and they don't manufacture any converted cellophane, and this case is only interested with the products that Du Pont manufactures and sells, not the products that some other person might manufacture and sell.

Now, I did not say in this paragraph—it is very, very aggravating to have the words constantly twisted. I did not say that Du Pont sold through. I said "Indirect sales which account for between 30 and 40% of gross sales are made to small purchasers through jobbers, agents, fabricators, and converters." The indirect sales, I did not say Du Pont made them. Du Pont sells under what they call their indirect sales division to converters who then in turn sell to these producers. This entire thing is being unnecessarily confused.

But how could converted cellophane, which is a different product entirely, possibly get into this case? and I would like to see any place in the complaint that we have charged that we are concerned with converted cellophane.

7411 Mr. GESELL. I am quite willing, your Honor, to limit the charge if Mr. Minicus is prepared to. I am not contesting his desire to limit it. I just want to get it pinned down once and for all. What he is saying, I take it, is that the customer that he wants to look at is the converter and if there is no competition with the converter but there is competition at the ultimate user, he

wants to forget the ultimate user and just talk about the competition in the sale to the converter.

It makes no difference to us. Our proof is stronger, if anything, on the wicket he now wants to put the case. But I do think we ought to have it pinned down.

Mr. MINICUS. I think it should be pinned down at that point. I don't think that the competition that the converter is involved in, whether he is selling his product—if there is any such competition—is important to this case. The important element is, is there any competition existing in the market in which Du Pont sells to the converter, and if there is, what is the nature of that competition? That is the important thing. But once the converter gets ahold of the cellophane and converts it, it is a new product, and I don't see how it could possibly come in to any case charging a monopoly of the manufacture and sale of cellophane.

Mr. GESELL. Well, Du Pont sells those goods, your Honor, in the marketplace constantly.

7412 The COURT. Well, my suggestion is that you each go your own ways and try your case.

Mr. RENNINGER. Continuing again, your Honor, Defendant's Exhibit 193 describes certain tests run by Du Pont Company on various materials that might be used for wrapping cigarettes. The report shows that poor handling of the material can greatly affect the performance of any material used.

Now, the tests were run, your Honor, in this instance on Riegelite, waxed glassine, Aqualene, Flexo-Aqualene, M. S. T. cellophane, standard M. T. cellophane, and 980-B M. T. cellophane, and the results of the tests—it said they all kept cigarettes in a satisfactory smokable condition over a 28 day period. Well, if that is so, why is it then that cellophane has been used almost exclusively as an outer wrap for cigarettes since 1930? It is these added features of true transparency, eye appeal, customer acceptance, feel, that makes cellophane a unique, separate and distinct product.

Defendant's Exhibit 194 again points up the visibility factor, moisture protection of cellophane. The statement is made that a new foil wrap, a heat-sealing type of paper lined foil is apparently three times as expensive as cellophane. This document points out that foil has to be laminated and heat sealed before it can be used to any advantage. Then its cost is way beyond the cellophane cost.

The foil used was a waxed glassine liner laminated with adhesive to the foil and then heat sealed.

7413 Defendant's Exhibit 201 describes the real competition in the packaging field in the tobacco industry in the sale of cellophane tube for Pollach Stogies, the Humitube Company, a

converter lost out to the Crystal Tube Company because of the lower price quoted. Both these companies manufacture these cellophane cigar tubes in competition with one another.

The COURT. You can finish after the luncheon recess, Mr. Renninger.

Will you go to the blackboard, Mr. Minicus.

(Mr. Minicus then went to the blackboard.)

The COURT. Print the word "sales" up there.

(Mr. Minicus complied.)

The COURT. Now draw a line down perpendicular to that.

(Mr. Minicus complied.)

The COURT. Now print "converter" some place across that line.

(Mr. Minicus complied.)

The COURT. Now, half way between that take an arrow, draw an arrow point into the line from the right.

(Mr. Minicus complied.)

The COURT. Now, is it at that point you say there is no competition? Is that your point? I want each of you to draw a graph for me and give me your theory and reduce it
7414 to I suppose you would call it Euclidian simplicity.

Mr. MINICUS. May I offer a graph of my own?

The COURT. You are on your own now.

Mr. MINICUS. All right. If we let "S", if we let this represent the defendant here [drawing on blackboard], this is a sale. Here is a converter [drawing on blackboard]. This is another sale [drawing on blackboard]. This might be any user of the converted bag rather than one who converts himself [drawing on blackboard]. Let's say it is Uneeda.

Then again take the defendant and a sale, and this time Uneeda perhaps, or A & P, without the converter. The converter is buying cellophane from the defendant that is in roll form or sheet form. He is taking and operating on it, and this is something different that he sells here. Here the ultimate consumer is buying cellophane from the defendant in roll and sheet form, completely unconverted. He himself will perform the converted function if any is necessary. In the case of cigarettes, no printing or anything else, just comes off the machine and is cut and tied or glued. This is the market we are talking about, your Honor [drawing on blackboard], and we claim that anything that happens in this market [drawing on blackboard] is entirely beyond the scope of this case.

The COURT. Is that the defendant's theory of the Government's case?

Mr. GESELL. No.

7415 The COURT. Do you want to go to work on the blackboard, Mr. Gesell?

(Mr. Gesell then went to the blackboard.).

Mr. Gesell. On this theory, your Honor, if this is the theory, we say there is competition at the point that that line is drawn [indicating]. That is what I understand their theory to be. But if I may, let me see if I can set this up.

There is your packager [drawing on blackboard]. He is the retailer or the wholesaler of goods made for pre-packaging. And here are your three manufacturers—let's put three down [drawing on blackboard]. This one is Sylvania, that one is Du Pont, and this one is glassine, wax, or any of the other materials. Now, they all sell to the packager direct—in practically all cases that is so. They all sell through a converter [drawing on blackboard], and we say the market and the whole pressure of the entire selling situation is to bring to bear on the user of the goods——

The Court. Who is going to sell it to you and me?

Mr. Gesell. Yes.

The Court. Who is going to sell it to you and me?

(At this point a luncheon recess was taken.)

7416 2:15 O'clock P. M., the Same Day.

Present: As before noted.

Mr. Minicus. The remark of your Honor's as you left the bench pointed out to me where I had failed to meet your question, and if I might be accorded no more than two minutes I think I can make our position clear, all aspects, with regard to the discussion we were having before the recess.

The Court. Did I make any remark?

Mr. Minicus. You said something about the impulse going back through the chain of distribution from the ultimate consumer and I have not touched on that point.

At the top here I have sketched a hypothetical chain of distribution. If it comes close to anything it is more closely akin to that in the yarn business, the cloth goods business.

We will start with the manufacturer, through the mill into the converter, the jobber, the retailer, and the ultimate consumer. I have used this because it is a little more drawn out. It illustrates it better.

Now, we conceive the yarn being manufactured here and sent to the mill to be woven. There is a buyer-seller market and a market here, likewise a market to the converter whose ordinary function is to print the woven material, the jobber and the retailer
7417 and then to the ultimate consumer with a market at each one of these points.

Now, the anti-trust laws have usually been interpreted according to a concept as any line of commerce, and we submit that each one of these markets presents a different line of commerce and that a bottleneck, sometimes resulting from a restraint of trade or mo-

nopolization, can occur in any one of these markets and the cases show cases against jobbers, against retailers, and so on.

All I was attempting to do this morning was to fix the particular market at which we say this bottleneck from the alleged monopolization occurs. However, your Honor's statement does bring out one factor that bears on this whole thing, and we had not gone to the point of drawing that out.

There is no doubt that the desire of this fellow here [indicating on blackboard], the ultimate consumer, in every case sent an impulse back into each one of these markets. There is no doubt about that. Or it may go this way [indicating], relating it back from one to the other. It is his desires here that govern certain conditions in every one of these markets.

We not only admitted, we proclaimed that for our purposes, and that in any one of these markets a bottleneck can occur which will frustrate his desires.

Now, moving down to the Government's position with regard to cellophane, we have listed here Du Pont as the dominant manufacturer of cellophane. Mr. Gesell, of course, will contend that there are manufacturers of glassine and others along in here [indicating], too. That is not the Government's position on this basis, that up here [indicating], too, the ultimate consumer's desires are related back. They are passed from one to another. But he is the fellow [indicating "ultimate consumer"] who opens the package of cigarettes to smoke, or the package of corn flakes to eat, or the garment, the wearing apparel, who decides what he wants. He is the fellow who may be governed by the impulse sale, the visibility, the feeling of the thing, or whatever it is.

7418

Now, we will endeavor to show that in time it is his desires [indicating "ultimate consumer"] to carve out this separate market for cellophane, and that that is related back. So these impulses do come back, and it is the desire here [indicating "ultimate consumer"] that creates them. However, the point we would like to avoid any confusion on is to get these other intermediate markets involved in this case. Despite these impulses coming back this way, we claim that the bottleneck that we are now talking about is right there [indicating on blackboard]. It is either in the relationships between the manufacturer and the converter or the manufacturer and the packager. But there is no doubt that things that happen here [indicating "ultimate consumer"] are going to affect what goes on in this market [indicating "packager"], in this market [indicating "converter"] and in this market [indicating "Du Pont"]. But our bottleneck, or the allegations of the case we say are based on monopoly are restricted to this market here [indicating]. That means that everything that

7419

moves out of the manufacturer is subject to the allegations of this case to the time it reaches either the converter on this line or the packager on this line. And the thing that we were trying to avoid this morning is to get any of the activities in this market confused with this one [indicating] except as this relationship of impulses from the ultimate consumer carries back.

Maybe Mr. Gesell would like to qualify some of that.

The COURT. I think you both have given me very lucid diagramatic explanations of the respective theories of your case.

Mr. RENNINGER. If your Honor please, I was pointing out various passages in the defendant's exhibits that I thought pertinent from our point of view. I will continue with reference to Defendant's Exhibits 211 to 230.

They are also salesmen's trade reports, usually isolated instances, but here again these documents point out the importance of eye appeal and impulse buying and unique features of cellophane in this respect. In one or two instances there we even find
7420 that the Du Pont salesman is urging the company to investigate the possibility of using substitutes for cellophane during a period of shortages.

In Defendant's Exhibit 214 we find a company using tissue, an article that the defendant has not contended to be in competition with cellophane——

Mr. GESELL. That is not so.

Mr. RENNINGER. You contend they are in competition with cellophane?

Mr. GESELL. Why, of course; tissues are a flexible packaging material.

Mr. RENNINGER. Anything in the flexible material line you contend is in competition?

Mr. GESELL. I say that tissues is one of the flexible packaging materials.

Mr. RENNINGER. I understood your contention was that this flexible packaging material market was limited to twelve distinct separate products.

Mr. GESELL. No, I never made any such contention. We have presented some statistics as to those by way of illustration, but there are other flexible packaging materials, too.

The COURT. You go on, Mr. Renninger.

Mr. RENNINGER. In Defendant's Exhibit 217, the company involved is using a rubber film and the Du Pont salesman stresses the company's use of Du Pont's polyethylene for the specialized purpose required. The document shows that each of the
7421 products named are separate products with separate and distinct characteristics that make one or the other better fitted for certain uses. The document also shows that plio-

film cannot be used on a normal packaging machine without the use of certain extra attachments.

Defendant's Exhibit 220 involves a call by a Du Pont salesman on the Marathon Corporation. The company, the Marathon Corporation, is going to use paper boxes on its paper napkins where it had used cellophane in the past. Here we have a statement that manufacturer's bleached sulphite and sulphite pulp for conversion into paper and paper board, the company itself converts such materials into packages and paper wrappers for packaging uses, and the company also converts cellophane and foil.

Then why out of all the complete line of products manufactured and converted by Marathon did it pick cellophane as a wrapper? It must be because of the distinctive characteristics of cellophane and its over-all superiority over other wrappers.

Defendant's Exhibit 227 is an interesting exhibit, as a sidelight. In that case a Du Pont salesman is trying to replace a company's use of a Kraft paper with cellophane on their 10¢ window shade item. The salesman states that cellophane will enhance the sale of 10¢ window shades as the public is skeptical anyway of buying a 10¢ window shade, and a glance at the Kraft package only
7422 perpetuates the customer's skepticism.

As to the illustrative advertisements, 58 of them, to be exact, many of the advertisements are undated, many of them don't state when or where they appear or whether they have been published at all. As with all ads of this general nature, they are replete with hearsay, completely filled with advertising puff, and are entitled to no probative value. These advertisements go to great lengths in the use of superlatives in describing a particular product. One advertisement, Defendant's Exhibit 232, uses the word "super" for practically everything under the sun.

The COURT. That must have been published in Hollywood.

Mr. RENNINGER. No, that would be "super-colossal".

Some of these ads talk about various tests made on their products, but there is no indication as to who made the tests or under what conditions or whether the tests were complete or sufficient as to detail.

However, let us consider a few of these ads. Let us take up a few of the Du Pont ads. From the earliest ad in 1926, as found in Defendant's Exhibit 231, until December, 1949, Defendant's Exhibit 274, Du Pont points up the distinctive features of cellophane, its transparency and protection.

As Defendant's Exhibit 234 states, and I quote, "Lets you
7423 see what you buy, saves you from disappointment." The ad goes on to say that without cellophane one would not get the full flavor and pleasure out of smoking.

Another one, Defendant's Exhibit 241, stresses maximum eye appeal, attractiveness, appetizing appearance, visibility.

Another one, Defendant's Exhibit 254, no date, says, "Cellophane shows what it protects—see what you buy."

A late ad of December, 1949, Defendant's Exhibit 274, talks about what the defense attorneys are trying to play down, that is, the importance of transparency. The ad says that it takes, "1, real transparency; 2, right protection; 3, true economy—all three to make an effective package". Also that Du Pont cellophane "shows what it protects—protects what it shows." This is a slogan for Du Pont cellophane.

What about some of the other ads? Defendant's Exhibit 239, no date, we evidently have an ad by Shellmar advertising Shell-Pax, which is called a rigid cellophane package. The claim is made that this product meets every test for convenience, protection, persuasive influence and pleasing advertising intrusion. It is interesting to note that in all of these other ads described, the claimed advantages of these other so-called flexible packaging or wrapping materials are based upon certain unique characteristics of each particular product.

Defendant's Exhibit 242 discusses various character-
7424 istics which the writer claims are present in that product, claiming that there are unique properties of pliofilm. This is what the Government means when it uses the word "unique", that cellophane has certain separate and distinct qualities which make it unique and place it in a separate, distinct class.

7425 These qualities are inferentially recognized by the Riegel Paper Corporation in its advertisement in the Defendant's Exhibit 245 where Riegel is stressing the importance of the product itself within the package in trying to minimize the dressing up of the package itself.

The next section on the identification of other flexible packaging materials consist entirely of various magazine articles from various magazines and Trade Journals written by various individuals, many of them being associated with the companies producing these various products and some of which are unsigned articles.

Most of these articles appear to be entirely biased, plugging for a particular product which the writer is principally interested in. The first section of Defendant's Exhibit 289 is written by a du-Pont official. The other sections of this article are all written by individuals associated with companies manufacturing the product that they are discussing in glowing terms. The duPont article, as usual, stresses the complete transparency of cellophane, the importance of impulse sales eye appeal and unusual moisture protection afforded by the product. The article ends with the statement

that "See what you buy is the watchword of so many foodstuff buyers."

Another section of the article deals with the importance of
7426 folding boxes in the packaging market. Another part of the same exhibit discusses paper sacks and their importance in any packaging market concept. This article states that paper sacks are the most widely used article in the packaging field. Why has the defendant not included paper sacks in its conception of a flexible packaging material market? The defendant is trying to make a new concept. If they had used the paper sacks in their so-called market it would have shown up immediately the complete fallacy of the defendant's position. Other articles in this exhibit deal with cotton bags and stockinettes and tin cans.

Another article in this exhibit points out that aluminum foil has to be used in combination with a paper backing or other material before it is suitable for packaging purposes. The article stresses the importance in the packaging field of the foil lined rigid carton. In the aluminum case Judge Hand and Judge Knox held that ALCOA had a monopoly of aluminum, and neither judge took into consideration all the other flexible packaging materials.

Defendant's Exhibit 290, discussing cellulose acetate, points out how only a very small percentage of cellulose acetate is used as a food wrap or as a flexible packaging material. The article stresses the importance of cellophane acetate as a window for various types of envelopes, boxes, and cartons and not so much its incidental use as a flexible packaging material.

7427 Defendant's Exhibit 291, your Honor, is an extract of the National Bureau of Standards publication on the permeability of membranes to water vapor. It describes in detail how a test of such a nature should actually be conducted. It can be seen by reading this article how little weight or probative value should be placed upon other tests described in the other defendants' exhibits.

It goes into great detail as to how the test should be conducted, under what conditions, under what circumstances and points out all the various factors that are important in conducting tests of such a nature. The results of the tests show that as to water permeability, the purpose of the article, cellophane had the best overall rating.

Defendant's Exhibit 292, on metal foils, again discusses the fact that aluminum foil has to be laminated and heat sealed to be of any value as a packaging material. The article states, on page 547, and I quote: "Annealing of aluminum is conducted in ovens usually heated by means of electricity, gas or oil." Here we see that electricity, gas and oil are used at the same time for the same purpose and can be used interchangeably. I doubt if anyone

would say that one could not have a monopoly of any one of these three items independently.

The article describes the various characteristics of alumi-
7428 num foil that limits its use in the packaging field, such as its non-sealing properties and low bursting and tearing strength, plus the possibility of pin holes in the lighter gauges. It is interesting to note that the defendant has used the lightest gauge made, .00035, in its comparison of price between aluminum foil and cellophane.

In the last sub-section of Defendant's group of exhibits called Defendant's Awareness of the Competition of Other Materials, the defendant, after a search through all the files of the defendant company, has come up with a group of 37 exhibits which it states shows that the defendant was aware of this so-called competition between cellophane and various other materials.

It is the Government's contention that these exhibits are far from any proof that the defendant company itself felt that there was any competition between cellophane and these products. It was only after the start of the trial of this case that the defendant really began to consider these products as competitors of cellophane. Of course, it is true that duPont ran various tests on various other products for various reasons. One reason, and perhaps the principal reason, was to see whether these other products did have certain characteristics that might in the future actually make them a competitor of cellophane. This is only normal business practice.

7429 DuPont, since it itself had developed a particularly new and revolutionary product which was able to enter into other fields and displace the products therein, was particularly cognizant of the possibility of another product doing the same thing to cellophane. However, in every instance it came to the conclusion that the other products tested could not do the job, nor would they possess qualities of cellophane particularly after a moistureproof cellophane was developed and the product perfected.

Defendant's Exhibits 308 to 311, inclusive, deal with the licensing of Riegel under duPont's moistureproof patent for the moisture coating of Riegel's papers. DuPont here does not seem to be interested or worried about competition from Riegel papers or glassine.

I would like to read a part of one exhibit that Mr. Gesell overlooked.

The COURT. What is the number of the exhibit?

Mr. RENNINGER. Exhibit 310, your Honor, the last two paragraphs of the record, and I quote:

"The Riegelite is not by a considerable degree as transparent for tight laps as is our coated tissue, and it is unquestionably true, as Mr. Riegel states, that they have done a great deal of work of
the coating of papers. They have undoubtedly seen our
7430 moistureproof patents, and particularly our composition
patent which has recently issued, and I imagine that the work which they have done experimentally runs against this patent. The Riegel Company, is, therefore, interested in making some sort of arrangement whereby we pool our interests—they on the paper end and we on the coating end.

"I think it is unquestionably true that they are an outstanding firm in the paper technology and, on the other hand, I think we know as much about moistureproof coatings as any other firm. To pool this information would undoubtedly result in a new, important business in the paper field, a field in which the paper companies would have the edge because of their familiarity with the paper trade.

"It is our patents that apparently are in the way of the paper companies' going into the manufacture of lacquer coated papers. Furthermore, we have probably six additional patents which will be filed shortly, all pertaining to the coating compositions and methods of treatment of paper for coating. This patent protection will probably mean much to us and I have a feeling that if a coated paper is to be exploited, an arrangement with the Riegel Paper Corporation whereby we could pull down some royalties might be to our advantage.

"Mr. John Riegel is in New York, as you will note, at 342
Madison Avenue, and I would suggest that you or
7431 someone you wish to appoint find out what he has in mind.
I realize that a good coated paper might make some inroads into the cellophane business; nevertheless, I don't think that we can turn a deaf ear to the Riegel Company, at least until someone has had a chance to talk to Mr. Riegel."

We have seen from the Government's exhibits already in evidence that Riegel was licensed under duPont's moistureproof patent for use on glassine only. This shows a difference of fields, separate fields, duPont for cellophane and Riegel for glassine.

Various other defendant's exhibits such as Defendant's Exhibits 315 to 322, inclusive, which are various surveys on the activities of the coated paper manufacturers, point out the superiority of cellophane and the disadvantages of Riegelite. Documents talk about the brittleness of Riegelite that tears easily, that it is used only on small cost items, that it does not have the protective qualities nor the transparency of cellophane and that it discolors easily.

Defendant's Exhibit 323, an interoffice duPont letter from Mr. Yerkes, recognizes the difference between cellophane and paper. The writer states that duPont will not go into the paper business but will sell lacquers and sizing to anyone in the paper trade. Mr. Yerkes also states that he does not feel that duPont would be able to stop paper manufacturers from attempting to
7432 make a substitute for cellophane. The writer implies that such a substitute has not been found.

The remaining documents talk about the characteristics of the new transparent films. These documents point out the limited use of pliofilm, the machine problems of pliofilm and various other disadvantages.

Your Honor, in looking through all these various trade reports, have you examined one carefully?

The COURT. No, not particularly carefully.

Mr. RENNINGER. May I hand a couple up? You note that in practically everyone of these trade reports there is some discussion at the bottom under the remark section as to various of these other products. You also notice that towards the top of the trade report you will find a square box in which duPont cellophane is listed and the supplier and the amount used. Then in the next block you have competitive materials listed.

It is interesting to go through these various trade reports with that thought in mind. When I first read them I said, Well, they are talking here in the body of the report about glassine, wax paper—this company using this, that or the other thing. I don't see anything much said in the box at the top of the report as to competitive materials. Evidently these salesmen do not feel these other materials are competitive materials.

7433 If your Honor will look at Defendant's Exhibit 222 under competitive materials box there, you will find a zero. The body of the report speaks of the company using glassine and cellophane. Evidently the salesman does not consider glassine as a competitive product.

Look at Defendant's Exhibit 208 under competitive materials. There is listed only Sylvania as a manufacturer of competitive materials, but yet the body of the exhibit talks about the company using a foil.

Defendant's Exhibit 148, under competitive materials, there is also listed none. The body of the report talks of the company using a laminated glassine bag.

After seeing a number of examples of this nature I thought I would make a count to see what I would find in all these trade reports, and there are 141 in this whole group of exhibits. Practically all of them speak about some other product in the body of the report.

Out of the 141 trade reports there are only 50 reports that list something some article or company, in the box under competition. Out of those 50 reports where competition is listed, 29 list Sylvania, two of them list Riegelite, 16 list Goodyear, 1 lists Cry-O-Vac, 7 list Cellulose Acetate, one lists Diaphane, 2 list Reynolds foil and 1 lists Celluloid Acetate. That should be included with the Celanese Acetate, which would make 8 for them.

7434 Several of them list two products like Sylvania and Celanese; one of them lists Sylvania, Celanese and Goodyear.

You noticed in very few instances where the salesmen have considered particularly the papers as being competitive with cellophane.

As a recapitulation of the number of documents in this exhibit—I think I have gone into it fully beforehand, but it is interesting to see— that out of all these exhibits that your Honor is asked to take into consideration very few of them are entitled to very little probative value.

Seventy-seven advertisements; 141 trade reports, 55 relating to duPont memos; there are only 3 marked surveys; 14 sales bulletins from the general manager to the salesmen; 15 duPont experiments; 18 magazine articles; 1 Department of Commerce Bureau of Standards publication; 1 Modern Packaging Encyclopedia and 3 Paper Year Book articles.

Mr. GESELL. I don't want to comment on Mr. Renninger's statement. I would like to go on with the facts.

We have come to the end of the market documentation, your Honor, except for one problem here of judicious notice which I would like to take up at the moment.

I discussed our schedule with Mr. Minicus and what we would like to do, if your Honor is agreeable, to adjourn in a moment and bring a witness on the first thing tomorrow

7435 morning.

We are planning to call Mr. George Bricker to testify as the authenticating witness of a series of schedules relating to the market, and if it is agreeable with your Honor I think both sides would like to start at 10:00 o'clock tomorrow if that does not inconvenience the Court's schedule. Mr. Bricker is from out of town and that gives us double assurance that we can get through with him.

I thought I would hand up a set of schedules to the Court now. These will be the schedules we will deal with tomorrow.

On this problem of judicial notice, we have been wondering what we ought to do in the further direction of pulling together source data for your Honor's consideration. I suppose we could

come up here with a list as long as your arm and I think that would be impractical in that it defeats its very purpose.

We have come around with this suggestion which we would like to urge upon the Court, and that is that the Court take judicial notice of a publication which is known as the "Modern Packaging Encyclopedia."

I have here from the duPont Technical Library the issue for the years 1946 and 1947. I would like to be able to refer to this issue and to other issues of this same publication in prior
7436 years for the purpose of data concerning this flexible packaging field.

There are many such in this encyclopedia, parts of which have no pertinency to the particular area of the packaging market that we are discussing, but there is in this particular volume, for example, important material in the sections relating to package planning, to banks, envelopes and packets and to wrappings, and also material of interest as to coatings, machinery and equipment. I would like to hand it up to the Court.

This is a publication mentioned in the Market Research Sources Publications in the Department of Commerce, and I am sure Mr. Minicus, from his studies of this market, is thoroughly familiar with it. It is an encyclopedia which is annually published by the Breskin Publishing Company, and it contains a classified directory of suppliers and manufacturers in the packaging field and articles on package planning, materials in packaging and displaying for packaged products. It has, as its title indicates, the basic source of information and occasionally your Honor will have seen an article or two from it or a schedule from it which I have selected and included in the exhibits.

7437 We have also thought as to whether there are any books or publications of other kind that we would want to refer your Honor to. There are two treatises on this field, both of which contain much useful and significant information by people who I believe are acknowledged experts in the field, the most important of which is the book of which other courts have taken judicial notice in this field, a publication by Mr. A. W. Frey, Professor of Marketing at Dartmouth College. His book is entitled, "Manufacturers' Product Package and Price Policies" and we are particularly interested in Chapter 11 entitled "Packaging and product." I could make a copy of that available to the Court if the Court so desired.

The COURT. I was just reading the section on the legal effect of packaging. Maybe I could find something to help me.

Mr. GESELL. That is one I have not read, your Honor. I thought possibly the Court might like, since we are adjourning earlier today, to glance at that publication from the point of view——

The COURT. Well, now, what do you propose, just to use it as a reference manual?

Mr. GESELL. As a reference manual, if questions come up as to who are the suppliers, who are the producers, what are the recognized properties, and so forth, of these materials. These are
7438 all held out to the trade in this publication which I am sure there can be no dispute is really, as it says, the Encyclopedia of Modern Packaging.

Mr. MINICUS. There might be some question about the properties. I didn't like the way that one slipped in.

The COURT. About what?

Mr. MINICUS. The recognized properties of the material.

Mr. GESELL. They are held out in there.

Mr. MINICUS. What I am getting at is this. If the Court takes judicial notice of this book and there are certain recognized properties they set forth, and tests that we might obtain from the Bureau of Standards of the United States Government are in contra-distinction to the properties they find here, we would have a little difficulty.

The COURT. Well, my theory of a court taking judicial notice is simply as a facile way of introducing proof of a document. The Court is not under any compulsion to accept anything that is contained in the writing which he takes judicial notice of. I may take judicial notice of any number of items, but it does not mean they are persuasive; it is simply a compendium of knowledge and information.

Mr. GESELL. That is my understanding, your Honor.

The COURT. So let us get by this problem right away. I will take judicial notice of the publication to which you have just
7439 made reference. Do you want to identify it in some way for the record?

Mr. GESELL. Well, this is the Modern Packaging Encyclopedia, and we would like to have notice taken of it. Its representative years are 1947 and some earlier years, so the trend in differences can be obtained—1932 and 1939.

The COURT. Will you extend the courtesy to Mr. Minicus to have the volume available to him in case he would like to look at it?

Mr. GESELL. Oh, certainly, and I would be only too glad to let him look at it in the meantime.

Mr. MINICUS. Thank you, sir.

Mr. GESELL. I also mentioned, your Honor, I think while you were glancing at that, this publication by Professor Frey.

The COURT. Of Dartmouth?

Mr. GESELL. Of Dartmouth. And I will make that available also.

The COURT. Then we will adjourn, as I understand it, for the day now.

(At this point the trial was adjourned to Friday, October 26, 1951, at 10 o'clock, A. M.)

7440 FRIDAY, OCTOBER 26, 1951, 10:00 O'CLOCK, A. M.

Present: As before noted.

Mr. GESELL. This morning, your Honor, DuPont wishes to call Mr. George Bricker as a witness. I am going to follow the practice of briefly stating to the Court the purpose for which the witness is called as a preliminary matter.

Mr. Bricker has been engaged on statistical studies in this market area, and the purpose of calling him to testify is to authenticate various schedules which summarize the results of his researches.

These schedules have been made available to the Government for their scrutiny and check, and we intend to go down the schedules with him one at a time.

Your Honor will recall I gave you a set of those schedules yesterday. The exhibits numbers, your Honor, are numbers in identification at this point for ready reference, but I took the liberty of marking them with those numbers to save Mr. Pollard's time in the courtroom.

Mr. Bricker, will you take the stand?

GEORGE W. BRICKER, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

7441 Direct examination by Mr. GESELL:

Q. Mr. Bricker, what is your full name?

A. My name is George W. Bricker.

Q. Where do you reside?

A. I reside in Cleveland, Ohio.

Q. By whom are you employed?

A. By Robert Heller and Associates.

Q. Where are its offices?

A. Its offices are in Cleveland.

Q. What is the Robert Heller and Associates?

A. Robert Heller and Associates is a firm of management consultants engaged in advising the managements of many of the large corporations in this country on matters of general management and marketing and production matters.

Q. How long have you been with Robert Heller and Company?

A. I have been with Robert Heller and Company for fifteen years.

Q. And can you tell us what has been the nature of your work with Robert Heller and Company in that period of time?

A. I have been engaged in advice to various companies on their managements problems. My assignments have been very broad

in nature. They have involved many different companies.

Many of them have had to do with marketing and in so
7442 conducting that work it has been necessary to go deeply in the sales and production records of the companies to find out the nature of their business—where their products are sold, to whom, what type of customers and what geographical areas.

Also, it has been necessary to learn what other products have been sold in those same markets by other companies. This has involved getting into Government statistics and other statistics of other associations in order to analyze their position in those markets.

Q. Well, now, I understood that on this particular job we are going to talk about you have been a job head. What is a job head?

A. I can best describe that by telling you how Robert Heller and Associates operate. We have a group of about fifty staff members. Of those four or five may be assigned to a particular client's job. One of the men is designated to coordinate all of that work and to be the chief contact with the head of the client. He is called the job head.

7443 Q. How long have you been a job head at Robert Heller & Associates?

A. I have been a job head for the last eight or ten years.

Q. Now, can you tell us what your college and professional education was, Mr. Bricker?

A. I graduated from the Massachusetts Institute of Technology in 1923. I then went to the Graduate School of Business Administration at Harvard, where I graduated in 1925 with the degree of Master in Business Administration.

Subsequently, while I was working as a public utility consultant in Boston, I attended Northeastern University at night and took my degree in law. I am a member of the Massachusetts Bar.

By the COURT:

Q. What was that last school?

A. The Northeastern University.

By Mr. GESELL:

Q. You say you went there at night?

A. Yes.

Q. In Boston?

A. It is in Boston.

Q. What was your employment before you went to Robert Heller & Associates?

A. On leaving the business school I was employed by
7444 Howard C. Hopson, Incorporated, in New York, Public Utility Managers. While there my work was primarily in

auditing and analysis of the accounts of various public utilities.

I then went to the firm of O'Hare, Lewis in Boston, who were Public Utility Consultants, where my work consisted primarily in the analysis of fixed capital and in various studies of the accounts of public utilities for presentation in rate cases before the Public Service Commissions.

I also prepared a classification, uniform classification of accounts for electric utilities which was promulgated by the New Hampshire Public Service Commission in 1933.

By the COURT:

Q. Have you ever had to value the shares of stock of a public utility?

A. No, I have not.

By Mr. GESELL:

Q. Robert Heller & Associates was asked some time back by my firm, was it not, to conduct some studies of the cellophane markets?

A. It was.

Q. When was your firm employed?

A. We were employed on this case about two years ago. We did some preliminary work at that time.

Q. How long have you been very active on this job?

7445 A. We have been active on this assignment for the last eighteen months.

Q. Were you the job head?

A. I was.

Q. How many men assisted you on the work?

A. I have had three of my associates with me full time on this assignment, and in addition to that, there have been several others who have worked from time to time on it. We have also had to call to a large extent on the facilities of our research and statistical organization in Cleveland in the preparation of these schedules.

Q. Mr. Bricker, what was the purpose of the work?

A. The purpose of the work was to assemble statistics regarding the markets in which cellophane is sold.

Q. And we are going to come back to those statistics in some detail, but can you tell us in a general way how you approached the task and what sources you turned to in an effort to develop information?

A. Our objective was to go to all possible sources of information. We started in by talking with personnel of the Du Pont Company. We then went to various agencies of the Government, to trade associations, to trade publications, we talked to manufacturers of various materials, we talked to converters of those materials.

We found that there was very little information
7446 available in compiled form regarding the end uses of these materials, but we did find some information where we were able to prepare statistics from Government sources and we later were able to prepare from private sources certain other statistics.

Q. And those are the ones we are going to discuss today?

A. That is correct.

Q. Now, Mr. Bricker, I want to show you two exhibits, DX-979 and 980 for Identification. You have copies of these exhibits before you, do you not?

A. I do.

Q. Did you prepare these two exhibits?

A. These exhibits were prepared under my supervision.

Q. And what was the source of the information from which they were prepared?

A. They were prepared from production records of the Du Pont Film Department.

Q. In connection with the preparation was it necessary to estimate any figures?

A. In the early years there were some few estimates of types of cellophane. The total figures were not estimated.

Q. That was in the years '25 and '29?

A. '25 and '29.

Q. Who made those estimates, Mr. Bricker?

A. Those estimates were made by personnel of the Du Pont Company.

7447 Q. To the best of your knowledge, information and belief, are these schedules true and correct?

A. They are.

Q. Without going into the content of them, what do they purport to show?

A. They purport to show a breakdown into the major classes of cellophane, the entire production of Du Pont cellophane. You will notice that in the early years there were not as many classes of cellophane as in the later years. In 1949 we have it broken into five major groups.

Q. Was the source of material for these schedules made available to the Government for their inspection?

A. It was.

Mr. GESELL. I offer them in evidence.

Are they to be received, your Honor?

The COURT. If there is no objection.

Mr. RENNINGER. No objection.

The COURT. They shall be admitted.

(Defendant's Exhibits Nos. 979 and 980 were received in evidence.)

By Mr. Gesell:

Q. Now, I wish to show you two exhibits, Mr. Bricker, which have been marked for identification as DX 981 and DX 982, entitled, "Position of Du Pont Cellophane in United States Market of Selected Flexible Packaging Materials Bienni-
7448 ally 1925 to 1949 Inclusive", the first schedule being a presentation of figures in tons and the second being a presentation of figures in thousand square yards. Have you those schedules before you?

A. I have.

Q. Were they prepared under your direction and supervision?

A. They were.

7449 Q. Are they, to the best of your knowledge, information and belief, true and correct?

A. They are.

Q. What was the primary source of the data on which you relied in preparing these schedules?

A. These schedules were prepared primarily from information certified to us by the Department of the Census—the Bureau of the Census.

Q. Will you describe the procedures used by you in the preparation of these schedules, how you got the information and how you had to fill it out, if you did, by estimates and other information?

A. We went to the Bureau of the Census in the first instance and asked for information regarding these materials and other flexible packaging materials. The Census figures are not consistent throughout all years and the Bureau of the Census prepared schedules for us which inflected the information which they had in their files on these materials.

It was necessary to go also to the manufacturers of certain of the films in order to get their production figures because they were not available through census sources directly.

Q. In Exhibit 981 was it also necessary for you to estimate certain figures?

A. It was. There were certain figures the Census did
7450 not have on certain types of materials. Those figures were estimated based on the ratio of those particular materials to other materials in other years.

The method of estimating that was checked carefully with the Census. It was also checked, in the case of the papers, with the American Pulp and Paper Association Economist, and we are satisfied those estimates fairly reflect those particular figures.

Q. So that I understand clearly the basis of this estimating, may I discuss with you two years? Would you turn to the second page of Exhibit Defendant's 981?

A. Yes.

Q. As I understand that sheet of the exhibit it presents in tons the production of these various materials?

A. It does.

Q. For the years indicated. Now, would you turn to the year 1947.

A. I have.

Q. What was the source of the first figure which relates to glassine, greaseproof and vegetable parchment papers?

A. That figure was certified by the Bureau of the Census.

Q. What is the basis of the second figure relating to waxing papers, eighteen pounds and over?

7451 A. That figure was certified by the Bureau of the Census.

Q. What is the basis of the third figure relating to sulphite bag and wrapping papers?

A. That figure was certified by the Bureau of the Census.

Q. What is the basis of the figure as to aluminum foil?

A. That figure was certified by the Bureau of the Census.

Q. What is the basis of the figure as to cellophane?

A. That figure is taken from the records of this case, the production of DuPont and Sylvania.

Q. What is the basis of the figure as to cellulose acetate?

A. That is the combination of the production of each of the three producers—DuPont, Eastman and Celanese provided to us by them.

Q. What is the basis of the smallest and last figure relating to pliofilm, polyethylene and saran?

A. That is a combination of the figure on saran supplied to us by the manufacturer, an estimate of the production of polyethylene film made by personnel of the DuPont Company and an estimate of the production of pliofilm made by personnel of the DuPont Company.

The COURT. I don't see any figures for that item.

7452 The WITNESS. For the year 1947.

The COURT. I don't see any on my copy.

Mr. GESELL. 2868 on the second page, your Honor. I tried to avoid discussing the figures because they are not in evidence yet.

By Mr. GESELL:

Q. For that year 1947 what percentage of the total was estimated by you?

A. The entire estimate amounts to one-tenth of one per cent of the total.

Q. Let us take one of these earlier years where you show that. Because of the nature of the material available at the Census more estimating was required. Let us take the year 1927. Will you tell us the basis there for glassine, greaseproof and vegetable parchment?

A. In the combination of glassine, greaseproof and vegetable parchment information was missing on the amount of vegetable parchment.

Q. How did you estimate that?

A. That was estimated on the basis of the ratio which vegetable parchment bore to glassine and greaseproof for the years 1942 to 1946, when that information was separately available in Census publications.

Q. Did you do anything to check the validity of that estimate?

7453 A. We did. We checked that with the Bureau of the Census and with the American Pulp and Paper Association Economist.

Q. Was there any estimating done with respect to the second figure, waxing papers?

A. With respect to waxing papers and sulphite bags those figures were reported by the Census in a combination which included also butcher's paper.

The estimate of the breakdown between waxing paper and sulphite bag and wrapping papers was made by taking the proportion which each of those three components, one of which was eliminated from this schedule, bore to the total in the years 1937 and 1939 when such information was available.

Q. What did you do to check the validity of that estimate?

A. That was also checked with personnel at the Census and American Pulp and Paper Association Economist.

By the COURT:

Q. Would you give me a physical description of that third item?

A. Sulphite bag and wrapping papers?

Q. Yes.

A. Those are papers made by the sulphite process which are used for making bags and for wrapping paper.

Q. Is that the ordinary bag which the grocer puts his

7454 groceries in?

A. No, that is a brown bag. The sulphite wrapping papers you recognize in many printed wraps which are not waxed. You would recognize it also——

Q. Where would I be apt to get one?

A. You would get a piece of sulphite wrapping paper in the drug store.

By Mr. GESELL:

Q. It is used as a pre-packaging material?

A. It is used as a pre-packaging material, the bulk of it, but you will find a sample that way.

Q. With respect to aluminum foil, what was the basis of your estimate there?

A. The aluminum foil figure for 1927 was an estimate based on the known information in later years and consultation with both the aluminum company personnel and with Reynolds. There were no figures available for that.

Q. Was it necessary to do any estimating on the imports which appear on the third schedule?

A. That entire schedule, the figures for the schedule, were certified to us by the Bureau of the Census.

Q. The title of this schedule is, "Selected flexible packaging materials." Will you state how you selected these particular packaging materials?

A. We found that these were the principal flexible
7455 packaging materials used primarily for the pre-packaging of retail packages.

By the COURT:

Q. In the United States Department of Commerce schedule which was certified to you, was cellophane included among these other materials and denominated as a flexible material suitable for wrapping?

A. We did not ask the Census Bureau for the cellophane figure.

Mr. GESELL. That, he said, came from the records of the company.

Q. What I want to know is, was it included in the category by the Department of Commerce?

A. The Department of Commerce has always, in earlier years, reported cellophane in another category, in the chemical division.

Q. And it did not include it in flexible materials suitable for wrapping?

A. They have no such classification as such.

7456 By Mr. GESELL:

Q. You asked for information as to these specific materials, did you not?

A. We did.

Q. And there was no category or classification at the Census of flexible packaging material, is that correct?

A. That is correct, as I remember it.

Q. Were the sources of your material from the Census and the various material you picked up from the different manufacturers made available to the Department of Justice for check?

A. They were.

Q. Did you explain to them the various procedures that were followed in the preparation of these schedules?

A. These procedures were explained in full detail and they were given the opportunity to look at all of our work papers and all the source material.

Q. With respect to 982, I want to ask you what basis you used for converting the production figures in 981 to square yards in 982?

A. Those figures were converted on the basis of information provided in the first instance to us by Dr. Stevenson, the Economist of the American Pulp & Paper Institute Association. We took care to check those estimates of his with various manufac-
7457 turers of paper and assure ourselves that those basis weights of 25 pounds for glassine, greaseproof, and 35 pounds for vegetable parchment, and so forth, were true and correct average basis weights for those materials.

Q. Mr. Bricker, are there other flexible packaging materials that are used in whole or in part for the pre-packaging of goods that are not included in these schedules?

A. There are.

Q. Will you name some?

A. Some of those would be kraft, tissue, butcher's paper.

Q. Why didn't you put figures as to those in this schedule?

A. Kraft paper in general is used as an industrial packaging material. The great bulk of it is used for that purpose. About the only kraft material that is used for pre-packaging of retail packages is bleached kraft, which in recent years has been increasing in volume but is still not broken down by the Bureau of Census.

Q. As a separate item?

A. As a separate item.

Q. What is the situation as to tissue?

A. Tissue is generally not used for pre-packaging of retail packages.

Q. The great bulk of it?

A. The great bulk of it.

7458 Mr. GESELL. I offer 981 and 982 in evidence.

Mr. RENNINGER. If your Honor please, the Government objects to the introduction into evidence of Defendant's Exhibits 981 and 982 marked for identification and asks the right to examine the witness on voir dire.

The COURT. Very well.

By Mr. RENNINGER.

Q. Mr. Bricker, do you have Defendant's Exhibit 981 marked for identification before you?

A. I do.

Q. I ask you to turn to Table 2 of that exhibit. You say that you prepared or supervised the preparation of this table, is that correct?

A. That is correct.

Q. You are entirely cognizant of the figures and the compilations made in the preparation of this table?

A. I am.

Q. How did you determine, Mr. Bricker, the years that you would use in the preparation of this table?

A. This table was prepared to cover the period from 1925 to 1949. It was prepared biennially to condense it.

Q. Who determined the 1925 and the 1949 figure?

A. We were asked by counsel to prepare figures for that period.

Q. According to the heading of this table it is the
7459 position of Du Pont cellophane in the United States market of selected flexible packaging materials. You say this is a flexible packaging material market. What do you mean by that statement?

A. This is a group of flexible packaging materials which are sold for flexible packaging.

Q. It is a group of flexible packaging materials. What are the limits of the market?

The COURT. I don't understand that question. You mean as to the different types of packaging materials?

Mr. RENNINGER. Yes, sir.

The WITNESS. This is merely a compilation of the production of these materials which are used primarily for prepackaging of retail packages.

By Mr. RENNINGER.

Q. Who is to find this particular market?

A. I can only repeat my answer. This is a compilation——

Q. Well, what does it include and what does it exclude?

The COURT. Well, it includes what is here.

By Mr. RENNINGER.

Q. Well, what does it exclude?

A. It excludes a number of other things which are also used in that market but for which we had no satisfactory statistics.

Q. You had no satisfactory statistics for other materials,
7460 is that correct?

A. That is correct. Had we put in kraft, we would have had a very much larger figure in there. Kraft we know is used primarily for industrial packaging.

Q. Is this just an arbitrary selection on your part or on the part of the defendant?

A. This is a selection of those materials which we found were used for pre-packaging of retail packaging.

Q. In other words, this is a pre-packaging flexible packaging material market?

The COURT. Wait a minute. I did not get that question. Would you read it, please?

(The Reporter read the last question.)

The COURT. I do not know what that means.

Mr. RENNINGER. If your Honor please, he stated that these were articles used for pre-packaging only.

The COURT. What does that mean?

Mr. RENNINGER. I presume he means they are wrapped before they get to the consumer and not wrapped in the store.

By Mr. RENNINGER.

Q. Is that correct?

A. Yes.

Q. Is that a correct statement, that this market then is a pre-packaging flexible packaging material market that you have set up?

7461 A. We were interested in finding those materials which are used for pre-packaging of retail packages.

Q. And you were only interested in those articles for use as a pre-packaging material?

A. That is the principal use of cellophane.

Q. Well, then, you are setting up an arbitrary distinct market, is that right?

A. We are trying to find out what materials were available for the same uses as cellophane.

Q. In other words, it is not a flexible packaging material market?

A. I cannot follow your question exactly. I have stated that these are the materials which are used primarily for pre-packaging of retail packages.

Q. Does the Department of Commerce, the Bureau of Census, recognize such an industry as you have set up here, a pre-packaging flexible packaging?

Mr. GESELL. He has not said he set up any industry. He has categorically denied that he set up any industry four times.

The COURT. Would you read the question, please?

(The Reporter read the last quetsion.)

By the COURT:

Q. The answer to that would be no, I presume, Mr. Witness?

7462 A. Yes, that is correct.

By Mr. RENNINGER:

Q. Mr. Bricker, you say that on this Table 2 many of the figures are actual figures given you by the Bureau of Census?

A. That is correct.

Q. Do you have any idea as to how many of those figures that you received from the Bureau of Census remain in the chart that you have here?

A. I remember offhand that we figured the percentage which the estimates represented, and they represented about 5% of the entire table.

Q. 5% of the entire table came from the Bureau of Census?

A. No, 5% was estimated, Mr. Renninger.

Mr. GESELL. 95 from the Department of Census.

Mr. MINICUS. Your Honor, I think that during Mr. Renninger's cross-examination he should not be interrupted. The witness is very well qualified to answer the questions.

The COURT. I agree with you. I do not think there should be any asides, Mr. Gesell. I do not think there should be any prompting.

By Mr. RENNINGER:

Q. Mr. Bricker, take the first item, glassine, greaseproof and vegetable parchment papers?

A. Yes.

7463 Q. For the year 1925 and on through to 1949—how many of those figures are figures that you obtained from the Bureau of Census and used in this table without adjusting in some manner or other?

A. Four.

Q. Four out of how many?

A. There are thirteen figures in that line. For the years 1925 to 1941 it was necessary to estimate vegetable parchment to include with figures actually certified for glassine and greaseproof.

Q. For waxing papers, 18 pounds and over, how many of those figures are figures that you actually received from the Bureau of Census?

A. As stated on the chart, there are, for the years '37 to '49—those figures are all certified by the Census, if I remember correctly.

In the previous years, as I explained, 1925 to '35, it was necessary to estimate the amount of butcher's paper which is included in a figure certified by the Census for all three groups, waxing papers, butcher's paper and sulphite bag and wrapping papers.

Q. And under sulphite bag and wrapping papers, how many of those figures were actual figures that you obtained from Census?

A. The same number as in the case of waxing papers.

7464 In other words, all those '37 to '49 were certified by the Census.

Q. The figure in 1941 of 4,000 tons under sulphite bag and wrapping paper, was that figure a figure that you obtained from Census?

A. I find that the 4,000 ton figure is under aluminum foil, Mr. Renninger.

Q. I beg your pardon. Take the year 1945, under sulphite bag and wrapping paper, is that a figure that you obtained from the Bureau of Census?

A. My recollection is that it is; but I do have some notation here which I don't remember.

Q. Do you or do you not know whether that came from the Bureau of Census?

A. I can find out by looking at my working papers.

Q. Are your working papers available?

A. I think those working papers are.

The COURT. Can we establish this fact in order that the record may be clear when I come to read it. What exhibit have you been referring to, DX-981, and if so, what page?

Mr. RENNINGER. 981, Table 2.

The COURT. Page 2?

Mr. RENNINGER. Table 2, or page 2.

By Mr. RENNINGER:

Q. I would like to know, Mr. Bricker, how many of the items appearing under sulphite bag and wrapping papers are
7465 actually figures that you obtained from the Bureau of Census?

A. Would you like me to get at my working papers now to answer that question in view of the fact that I have some questions in my mind about one figure?

Mr. GESELL. Your Honor, I would much prefer that he look at it now and straighten this up as we go along.

Mr. RENNINGER. I think that would be adviseable.

By the COURT:

Q. Where are your papers, sir?

A. I believe they are down there.

The COURT. All right, take your time.

(The witness left the stand and secured further papers.)

The WITNESS. I find that in the year 1945 an estimate was made for bag paper which was not supplied by the Bureau of the Census.

By Mr. RENNINGER:

Q. How many then out of the figures that you have obtained from the Bureau of Census, which I understand includes glassine, greaseproof, vegetable parchment, waxing paper, sulphite bag and wrapping paper—how many of those are actual figures that you obtained from the Bureau of Census for this whole period?

A. You understand that in the figures which were not copied directly from the Census certification to here, there
7466 are included figures which were certified by the Census.

Q. I am talking about these figures here?

A. The figures on this schedule which were copied directly from the Census certification for glassine and greaseproof, waxing paper and sulphite bag and wrapping paper—17.

Q. Out of how many items contained on this chart that you say are based on the United States Department of Commerce figures?

A. Out of 39.

Q. And what percentage would that be, approximately?

Mr. GESELL. I object to that question unless he specifies percentage of what? Percentage of the total figures or the number of entries on the chart?

Mr. RENNINGER. I asked him how many of the figures appearing in this table under glassine, greaseproof and vegetable parchment paper, waxing paper, sulphite bag and wrapping papers were based, or were the exact figures obtained from the Bureau of Census. Then I went on and asked him how many of those figures, and he stated that there were 17 out of 39 that were actual figures obtained from Census. Then I asked him what percentage of the figures obtained from the Bureau of Census would this represent.

Mr. GESELL. My objection is as to the form of the question. Does he ask the percentage of the total of those figures——

The COURT. Mr. Renninger, try it again.

7467 By Mr. RENNINGER:

Q. What percentage do these two figures that you have just given me bear to the total number of figures that you have used in this chart which you claim are based on United States Department of Commerce figures?

Mr. GESELL. I renew the objection.

The COURT. Before passing on the objection, I don't understand the question.

Mr. RENNINGER. I am trying to find out what percentage seventeen is to thirty-nine.

The COURT. Can't you do that yourself?

Mr. RENNINGER. I am asking the witness to so state.

A. Seventeen is something less than one-half of thirty-nine, but if I may add to the answer, in these other figures, in the other twenty-two figures are figures that are certified to by the Bureau of the Census. It is not a fair representation to say that seventeen out of thirty-nine are all the figures that came from the Census.

By Mr. RENNINGER:

Q. I am asking as to the figures shown in this chart here?

A. Some of those figures are combinations of the figures in the Census to further estimate.

Q. What percentage of this total production given here is actually used as to wrapping or packaging material?

7468. A. The very great bulk of it.

Q. What percentage? Do you know?

A. I have no way of knowing exactly. We know that cellophane, some small percentage of cellophane, is not used for packaging.

Q. What about the other materials?

A. Glassine, greaseproof, the association will tell you that ninety per cent is used for that purpose. There are no statistics on it.

Q. You have no actual knowledge as to what percentage of this total production is actually used as a wrapping material?

A. These are the materials available for use and are used largely for retail packaging and pre-packaging.

Q. What do you mean by retail packaging?

A. Pre-packaging of retail packages?

Q. Now you have another distinction.

A. No, that was the first one.

Q. A pre-packaging of retail packages?

A. That is correct.

Q. Then it is not really a flexible packaging material market here that you are talking about at all?

A. There are many other materials used for pre-packaging of retail packages, but we have not included them.

Q. Why not?

7469 A. We were instructed to limit the study to flexible packaging materials.

Q. Isn't fruit and vegetable tissue a flexible packaging material?

A. It is.

Q. Why didn't you include that?

A. Because that is a minor use material.

Q. What do you mean it is a minor use material? What else is it used for?

A. Fruit and vegetable tissue is one of many tissues which were not included in the study because it did not seem to add to the picture.

Q. How do you mean it did not seem to add to the picture? Are they not a flexible packaging material?

A. They are.

Q. Are they not used for pre-packaging?

A. They are, although fruit and vegetable tissue is usually a wrap of some sort that goes in another package.

Q. Doesn't that apply to any of these other items?

A. It may.

Q. I am trying to get why you actually excluded the item. It is a flexible packaging material. Why was it excluded?

A. This seemed to be a fair comparison of the materials which are primarily used for the same purposes that cellophane
7470 is used?

Q. In other words, it is not a flexible packaging material and market at all?

A. It is a group of flexible packaging materials which are used for pre-packaging of retail packages.

Q. You said fruit and vegetable tissue is a similar item?

A. There is also glass and tin and cardboard.

Q. Are they flexible packaging materials?

A. They are not flexible but they are used for pre-packaging of retail packages.

Q. Why did you exclude waxing paper up to eighteen pounds?

A. Because that is a waxing tissue.

Q. Don't you have a waxing tissue here—wrapping papers, waxing papers?

A. In this schedule?

Q. Yes, eighteen pounds and over.

A. Eighteen pounds and over is a well-recognized classification. That is primarily the stock used for bread wraps.

Q. What about waxing paper under eighteen pounds?

A. That is primarily a tissue.

Q. Is that not used as a wrapper?

A. Some of it is. It is largely florist tissue.

7471 Q. Isn't that used as flexible wrapping material?

A. I would not say that. Florist items are ordinarily pre-packaged.

Q. Is that the only use of wrapping papers up to eighteen pounds, just for florist items?

A. No.

Q. What are some of the other uses?

A. I don't believe I can state what they all are.

Q. You don't know? You arbitrarily excluded this without knowing what the product was used for?

A. From our studies the product is not used for the purposes of which we are talking.

Q. What is the purpose of your studies?

A. I said from our contact in the field and from our knowledge of this business.

Q. You say from your contact in the field and from your knowledge of the business you don't consider it properly to be used in your study and then you can't tell me what it is used for. How do you know it is not proper for use in this study?

A. It is not commonly used for anything for which cellophane is used.

Q. You are trying to get things that cellophane is used for?

A. We are trying to get materials for the purpose that
7472 cellophane is used.

Q. We are getting out of the pre-packaging material class and down to items that you think the materials that cellophane is used for?

A. The principal use of cellophane is pre-packaging of retail packages.

Q. What about butcher's paper?

A. It is not ordinarily used for pre-packaging.

Q. I don't know what you exactly mean by pre-packaging. Will you give me a better definition?

A. Pre-packaging is the preparation of a package for sale at retail by the manufacturer or the packager of the product. It is not used for packaging something sold in bulk in a retail sale.

Q. In other words, a converter product principally?

A. Most of it goes through converters. A large number of it goes through converters or is converted by the packager himself.

Q. What percentage of glassine, greaseproof and vegetable parchment papers do you estimate was used as pre-packaging materials?

A. Glassine and greaseproof association says about ninety per cent.

Q. I am talking about pre-packaging, not for use as a flexible wrapping material.

7473 A. The bulk of it is for pre-packaging.

Q. Will you estimate it?

A. I have seen statistics of the glassine and greaseproof association that show that about ninety per cent of glassine and greaseproof is used for packaging. Looking down the list of the uses it would appear that the bulk of that is pre-packaging.

Q. You have identified parchment papers included here. Why did you not include imitation parchment?

A. Imitation parchment, from any information which we had, is not used in any large quantity in this field.

Q. What is it used for? Do you know?

A. I know it is used in some butcher's wraps.

Q. What else?

A. It is used—I can't state at this time.

Q. You say that in your survey of the field that you found that these were not items that you felt should be included in your study and yet you know nothing about imitation parchment

papers or anything about waxing papers up to eighteen pounds or fruit and vegetable tissues and what all those products are used for? Isn't this an arbitrary selection——

Mr. GESELL. Let him answer the question. He has three questions. He is entitled to answer one at a time.

The COURT. Will you read the question?

7474 (The last question was read by the reporter.)

A. This selection was made by conversations with the Bureau of the Census, with people who are familiar with these materials, with the Pulp and Paper Institute, with manufacturers of the various materials and the consensus is that these are the materials which are primarily used for the pre-packaging of retail packages.

By Mr. RENNINGER:

Q. Did the Bureau of the Census say that you should leave waxing paper up to eighteen pounds out of this study?

A. Yes.

Q. They did?

A. Yes.

Q. Did the Bureau of the Census tell you that you should leave fruit and vegetable tissue out of this study?

A. Yes, I believe they did.

Q. You are under oath now.

A. I said I believe they did. We have no written proof that they did. That is one of a series of conversations over a period of time about how to select the materials which were primarily used in this field.

Q. In the field of pre-packaging of only those pre-packaged items that are used in the pre-packaging of items similar to cellophane. Is that what it is getting down to?

A. I said pre-packaging of retail packages.

7475 Q. So that in talking about the pre-packaging of retail packages, fruit and vegetable tissue, waxing paper up to eighteen pounds and imitation parchment would be included in that category, would it not?

A. Any of the other materials may be used for that same purpose, but they are not the principal items used for that purpose. Had we been able to get all the statistical information we wanted we might have been able to include those parts of the other materials which are used for the same purpose. We tried to be conservative by not picking those items.

Q. Did you or did you not get figures from the Bureau of the Census on fruit and vegetable tissues?

A. I believe we did.

Q. Did you or did you not get figures from the Bureau of the

Census for this period of time on waxing papers up to eighteen pounds?

A. We did. We asked for the information in the first instance when we started to work on this.

Q. Did you also get butchers papers from the Bureau of the Census?

A. We asked the Census to work on this. When beginning this study, before we found out what these materials were we wanted, we gave them an entire list of all those things that might be wanted.

7476 Q. Did you not state a little while ago that one reason you excluded some of these items was due to the fact that you could not get adequate figures from the Bureau of the Census?

A. Yes.

The COURT. Mr. Renninger, it seems to me you have exhausted your voire dire examination. You are really cross-examining the witness. Do you have any motion?

Mr. RENNINGER. I have just started.

The COURT. You have started what—the voire dire?

Mr. RENNINGER. Sir?

The COURT. I gave you the opportunity on voire dire examination in order to challenge the authenticity of the writings which have been offered. It seems to me you have left that. You are really cross-examining the witness, and I think that opportunity ought to be afforded to you completely and fully after Mr. Gesell finishes.

Mr. RENNINGER. All right, sir. I have other questions on voire dire. I will turn to that.

The COURT. You have?

Mr. RENNINGER. Yes, sir.

By Mr. RENNINGER:

Q. Mr. Bricker, will you explain how you separated the figures that you obtained from the Bureau of the Census relative to glassine and greaseproofs and vegetable parchment papers to ob-

7477 tain the figures that you used in this Table 2 for the early years.

Mr. GESELL. What table do you mean, Mr. Renninger, the second page of 981?

Mr. RENNINGER. You are calling it a page rather than a table? The second page, then.

Mr. GESELL. It has a page number on it.

A. What is the question?

By Mr. RENNINGER:

Q. Take any of the early years, 1925, 1927, 1929. I think you told Mr. Gesell that those figures had to be estimated under glas-

sine, greaseproofs and vegetable parchment papers. How were they estimated? Will you describe how these figures were estimated?

A. The Bureau of the Census provided that certified figures on glassine and greaseproofs in those years 1925 to 1941. They did not certify a figure on vegetable parchment. It was necessary to estimate vegetable parchment during the years——

Q. I——

Mr. GESELL. Let him finish his answer.

A. (Continuing.) During the years 1942 to 1946 there were figures on vegetable parchment and on glassine and greaseproofs separately which gave a ratio between those two. That ratio, the average for those five years, was used to project back the
7478 amount of vegetable parchment which was produced and included in other figures in the Census which we did not have for those years.

That basis of estimating was checked with the Bureau of the Census, was checked with the American Pulp and Paper Association Economist and it was also checked with some of the manufacturers of parchment as to whether that was a fair ratio in those years, and they agreed that that was a good a basis that could be had for estimating the amount of vegetable parchment in those years.

Q. The years that you took were war years, weren't they?

A. That is correct, but I say we checked with these various authorities as to whether that was a fair figure to use in previous years or whether there had been any difference particularly in the ratio of vegetable parchment to glassine and greaseproofs. These materials are all known to the associations.

Q. Mr. Bricker, can you give me an idea as to the actual production of glassine and greaseproof papers prior to 1940?

Mr. GESELL. I don't understand the question, your Honor. I object to it.

The COURT. I don't understand it.

Q. You stated that you separated the glassine and the
7479 greaseproofs from the vegetable parchment and that you had the actual figures for glassine and greaseproofs?

A. Yes.

Q. And you had the vegetable parchment figures for the war years; is that correct?

A. That is correct.

Q. And as a result of having the vegetable parchment figures for the war years you estimated the vegetable parchment figures for the years prior and subsequent to the war years; is that correct?

A. No, not subsequent; only prior.

Q. I am asking you now, what was the production of glassine and greaseproof papers prior to the war year —that is, prior to 1940?

A. By years, you mean?

Q. Take the years 1939, 1938.

A. What years would you like?

7480 Q. '37, '38, '39, '40?

A. For the year 1937 glassine and greaseproof were 61,709 tons.

Q. 1939?

A. 74,444 tons.

Q. 1942?

A. 104,191 tons.

Q. 1943?

A. 111,030 tons.

Q. In other words, the production of glassine and greaseproof papers increased considerably during the war years?

A. It did.

Mr. GESELL. Your Honor, this doesn't sound like voir dire to me. I don't want to cut it short if Mr. Renninger wants to go on——

Mr. RENNINGER. I am trying to get into the basis of his estimates here. I think it definitely goes to voir dire.

The COURT. I think you ought to do that on cross-examination and then if you want to make a motion to ask me to strike the exhibit that is in evidence, I will. I want to get along with this business.

Mr. GESELL. Your Honor didn't mean to say he would strike it?

The COURT. It seems to me you ought to test your advocacy by cross-examination and then make a motion to strike, because you are probing so deeply that you are not helpful to me because

7481 Mr. Gesell has not covered this whole field yet so that I can have a thorough understanding of what the purpose of his offer is. And after he gets through, then I will be better able to appreciate the inherent weaknesses you think lie in these writings. But at the moment it has no effect on me.

Mr. MINICUS. May I suggest then, your Honor, that we waive all of our voir dire and take this all up for each one of these charts on cross-examination. I think it would be more helpful to everybody.

The COURT. I would prefer that approach.

Mr. MINICUS. Thank you, sir.

(Defendant's Exhibits Nos. 981 and 982 were received in evidence.)

By Mr. GESELL:

Q. With respect to 981 and 982, Defendant's Exhibits in evidence, Mr. Bricker, did you on those schedules attempt in any way

to define the limits of a flexible packaging market or did you merely list the materials that are listed there?

A. I listed the materials that are listed here.

Q. And if you had included the various items that have been discussed by Mr. Renninger on his voir dire would that have increased or lowered cellophane's percentage?

A. It would have lowered cellophane's percentage.

Q. What percentage of all the figures in those items did you say were estimated and what percentage were founded
7482 on figures of the Bureau of Census?

A. 85% were founded on the Bureau of Census, 10% on figures from companies or in the case, and 5% were estimates.

Q. Now, will you turn to Exhibit 983. In looking at this last night I feel I wish to amend the caption so there will not be any misunderstanding as to the purpose of this exhibit.

The caption reads, "Principal Competitors of Du Pont in Manufacture of Competing Flexible Packaging Materials." I desire to change the caption simply to read, "Principal Other Manufacturers of Flexible Packaging Materials." This exhibit is not offered for any purpose of establishing or defining competition.

By Mr. GESELL:

Q. Do you recognize that exhibit?

A. I do.

Q. Was it prepared under your supervision?

A. It was.

Q. From what source was it prepared?

A. Prepared from information in Moody's Industrial Manual for 1950.

Q. What does it purport to show?

A. It purports to show a list of the principal manufacturers of the flexible packaging materials which are listed down the
7483 center column here, and their total assets, net assets, and sales volume for the year 1949. It also shows the date they were organized.

Q. That is based on Moody's Industrial Manual for 1950?

A. That is correct.

The COURT. Well, I do not see Du Pont listed there. What are we comparing?

The WITNESS. The caption is, "Principal Other Manufacturers——"

Mr. GESELL. Principal other manufacturers, your Honor.

I offer it in evidence.

The COURT. All these documents, Mr. Minicus, I am going to admit subject to a motion on your part or Mr. Renninger's part later to strike.

Mr. MINICUS. That is the way I understood your Honor's statement.

The COURT. Let DX-983 be admitted.

(Defendant's Exhibit 983 was received in evidence.)

By Mr. GESELL:

Q. Now I want to direct your attention——

The COURT. Let me go back to DX-983. What is the purpose of this?

Mr. GESELL. The purpose of that, your Honor, is merely to show that there are other concerns which have been in business a
7484 long time which have substantial assets that are engaged in the manufacture of these flexible packaging materials. It is not meant to show any comparison. It is not meant to be any test of relative competitive strength. It is merely the facts. Your Honor inquired the other day as to whether those companies had gone out of business or whether they were still going. It shows they are still going and what their assets are.

By Mr. GESELL:

Q. Now, Mr. Bricker, I want to direct your attention to Defendant's Exhibits for Identification 984 to 988, which for convenience I will refer to as the converter study. 984 is captioned, "Major Material Groups by Principal End Uses".

985 is a chart captioned, "Flexible Packaging Materials, Importance of Major Material Groups by Principal End Uses".

986 is a chart entitled, "Flexible Packaging Materials, Relative Importance of Principal End Uses All Materials and Cellophane".

The COURT. May I inquire, Mr. Gesell, why on DX-984, 985, etcetera, that tobacco is not listed?

Mr. GESELL. These are dealing, your Honor, with converted items, and cigarettes a major tobacco use is a direct sale item.

The COURT. Very well.

7485 Mr. GESELL. I will inquire of the witness about tobacco items when we come down the schedule.

987 is captioned, "Importance of Principal Materials in Converter Study".

988 is a series of schedules captioned, "Materials Sold for Representative End Uses by Converters, Year 1949".

By Mr. GESELL:

Q. Do you recognize this as a group of schedules which were prepared under your direction and supervision?

A. I do.

Q. Now, would you explain to the Court what this converter study is?

A. You remember, Mr. Gesell, that in these previous exhibits we had information only of total production of materials. We had found no way of getting end use information for any of those materials. You asked us to get what information we could about the end uses of these materials. There were three possible sources for that. One was to go to the manufacturers and ask them what information they had. They had none or if they had, they were unwilling to release it.

The second source would have been to go to the packagers of these products. That would have meant going to hundreds, maybe thousands of companies in the country to try to get a true cross-section of what they used for packaging their products. Furthermore, it was very unlikely that they would have easily

7486 available in their records any information as to exactly what products had been packaged and what materials were manufactured where there was more than one product.

The third source was converters. We had to make a sampling. We couldn't expect to get the entire story of all packaging materials. We had to sample, and by going to the converters who had in their records—they had to have in their records information as to the materials they used and the end uses for which those materials were put, because they were making tailor-made packages for their customers. They had to know what the product was they were packaging. They printed it in some cases, and they knew from that itself what the product was.

Therefore, if we could get a representative group of the larger converters, we would have a cross-section of what materials were used for what end uses.

Q. Were there any figures on end use available at the Bureau of Census?

A. There were not.

Q. Well, now, as these schedules show, this study is based upon the records of nineteen converters?

A. That is correct.

Q. Do you have a list of who those converters are and where their various records were kept?

A. I do.

Q. Will you state who they were and where their records

7487 were kept?

A. These converters were the Traver Corporation at Chicago, Illinois.

Nashua Gummed and Coated Paper Company, Nashua, New Hampshire.

The U. S. Envelope Company, in Springfield, Massachusetts.

Forbes Lithograph Manufacturing Company, in Boston.

American Paper Goods Company, in Kensington, Connecticut.
The Union Bag & Paper Corporation, in New York.
Oneida Paper Products, Inc., in Clifton, New Jersey.
Benjamin C. Bether Company, Devon, Pennsylvania.
The Dobeckmun Company, in Cleveland, Ohio and Berkeley, California.
Munson Bag Company, in Cleveland, Ohio.
Shellmar Products Corporation, in Mt. Vernon, Ohio, and South Gate, California.
Fabricon Products, Inc., in Detroit, Michigan.
Kalamazoo Vegetable Parchment Company, in Kalamazoo, Michigan.
Milprint, Inc., in Milwaukee, Wisconsin.
Marathon Corporation, Menasha, Wisconsin.
Waxide Paper Company, in St. Louis, Missouri and Kansas City, Missouri.
7488 Western Waxed Paper Company, in San Leandro, California, Los Angeles, California, and Portland, Oregon.
Reynolds Metals Company, in Louisville, Kentucky.
The Dixie Wax Paper Company, Inc., in Dallas, Texas, and Memphis, Tennessee.

Q. Will you explain how these particular converters were selected?

A. As a result of talking with various people at Du Pont and various converters, we arrived at the opinion that a group of some 23 converters would give us a very broad section of this entire converting industry. We had four controlling factors we had to take into account.

In the first place, we wanted to be sure that we covered the great bulk of cellophane. We wanted to be sure that we had a very wide variety of end uses. We wanted a geographical distribution, and we wanted to be sure that we were covering converters of all of the flexible packaging materials used for these purposes.

Of the 23 companies, four were unable to cooperate for one reason or another. That left us with the 19, which included the six largest converters of cellophane.

Q. Have you any estimate of what percentage of converted cellophane is covered by this study?

A. We estimate that over two-thirds of converted cellophane is included in this study.

7489 Q. Do you mean by that Du Pont cellophane or Du Pont and Sylvania cellophane?

A. I mean Du Pont and Sylvania.

Q. This included converters of Sylvania as well as of Du Pont cellophane?

A. It did.

Mr. GESELL. Your Honor, at some point here we ought to take a mid-morning recess. It will take some time on these schedules.

The COURT. Recess for ten minutes.

(At this point a brief recess was taken.)

By Mr. GESELL:

Q. Mr. Bricker, you have just described the basis on which you selected these 19 converters for the purpose of this study, which was looking for information as to end use. I now ask you how did you go about getting this information from the converters?

A. My associates and I went out personally to each one of these converters, sat down with their representatives, discussed the form in which their records were kept and explained to them the information which we would require for the study. That information was a complete analysis of their sales by individual types of material and by the end uses, the specific end uses, for which those materials were sold on an area basis.

7490 We found that that information was not available in compiled form at any of the converters. Some of them were able to prepare partial tabulations of some of this information from punch cards which had been kept in the normal course of their business. In some cases they had customer cards on which they had recorded for each customer the various orders he had placed and what the material was and the imprint and so forth on his orders.

However, in the majority of cases it was necessary to go back and make a complete listing of invoices which would show this information in detail.

Q. Now, you chose the year 1949 for the purpose of this study, did you not?

A. Yes.

Q. Why did you choose that year?

A. That was the most . cent year at the time we started this study, and we soon found out that if we attempted to get any earlier year from these converters there would be great difficulty in digging out the records.

Q. Mr. Bricker, how long did this job take?

A. This took a total of eleven months to complete.

Q. And roughly how many different plant locations were these records at?

A. The records were at 25 different plant locations.

Q. Who did the actual work of tabulating the converters'

7491 records?

A. The work was done by regular employees of these converters or by special employees that they brought in working under their own supervisory people.

Q. Approximately how many converter personnel worked in the preparation of this data?

A. Altogether about 200.

Q. And what is your estimate of the number of invoices that are summarized in these schedules?

A. There are about 350,000 invoices.

Q. How long did you say it took?

A. Eleven months.

Q. And who paid for the work?

A. We paid the converters for the account of Du Pont.

Q. Did you design a special form on which the converters would assemble this data?

A. We did.

Q. I show you two documents, 984–A and 984–B, which I have so marked, and is that the form and the instructions?

A. It is.

Mr. GESELL. May I hand that up to the Court.

By Mr. GESELL:

Q. And as I understand your testimony looking at 984–A you obtained from each of these converters the information listed
7492 on that form for their entire business in flexible packaging materials for the year 1949?

A. That is correct.

Q. What was the volume of the total material that you got from the converters in that manner, Mr. Bricker?

A. It amounted to four trillion square inches.

Q. I meant the physical volume of the data.

A. The material which came in to us from the converters filled about 12 or 14 file drawers.

Q. And subsequently using that as the source material that you worked on, you compiled these various schedules?

A. We did. They were compiled in our office in Cleveland.

Q. Did you have any understanding of any kind with the converters with respect to the disclosure of the data that they gave you?

A. We did. It was clearly understood with them that all of the source documents of theirs, their regular business records which had been used in preparing this information for us would be available for Government inspection at whatever time the Government desired to inspect it.

Q. What understanding did you have as to the disclosure of their individual information?

A. We had a distinct understanding that we in making our final summaries would not list any figure which would disclose in any way a part of any one converter's business.

7493 Q. As a matter of fact, has this detailed information as to the various converters' business been shown to any official or employee of the DuPont Company?

A. It has not.

Q. What steps did you take to determine that this work by the converters was done in the manner you had asked to have it done?

A. During the entire course of separation of this, at the converters my associates and I made frequent visits to check on the progress of the work and to spot-check its accuracy as it was being done. We found errors; we corrected them. Where we found considerable error we instructed the converter that he would have to go back and re-check all of the information and provide better supervision.

By the COURT:

Q. How did you sell them the idea that you wanted this information?

A. We have had occasion in our work in the past to go to the various distributors, various companies, to develop a market study to find out what happens in a particular area, and the basis on which we have been able to get that, even though we are working for a particular client and the various distributors may or may not handle the product of that client, we tell them what we are trying to do. We are trying to get a picture. They recog-

7594 nize our integrity, that we are not going to turn that information over and we also offer to give them the final, completed summary for whatever use it may be to them. That has been usually the basis. We always pay them for the work they do. Their employees are usually interested in working on the thing overtime.

Q. You don't give them any material which might affect their competitors?

A. No, we carefully take care of the disclosure situation every time.

By Mr. GESELL:

Q. Mr. Bricker, in addition to checking to see that the work was done in the proper manner, did you make any check to determine whether the records of the converters were complete for this year?

A. We did, through information that was listed on the forms, the dollar amount of the sales. The reason for that was to get a control which could be compared with their sales records so that we would know we had covered all of those records.

Q. Will you state what work had to be done by you and your associates on this mass of material after it was obtained from the converters?

A. When this material came in it was necessary to code all of the various materials on each of these sheets, to code the end use,
7495 to insert and apply the conversion factors necessary to convert from pounds or from number of bags or whatever way the quantity information had come in to us into an area.

We had to take great care of these conversion factors because our objective was to have the single area of any wrap. If we had a laminate we did not want to get the area of both pieces of material. We wanted the single area of that wrap. That was coded as a combination of those two materials.

If it was a combination of cellophane and foil it was listed as a combination of cellophane and no information would appear on foil.

We had to go through all that coding and the entry of those conversion factors and then it was turned over to the I. B. M. Service Bureau in Cleveland to punch cards from which we could sort the material and tabulate it by end uses and by material.

Q. That is what you did?

A. Yes. It was not until we had that information for each of the nineteen converters assembled that we were able to deal with the problem of disclosure and the problem of simplifying it down to a useable, easily understood schedule. We had about 3,000 different combinations of materials and end uses.

Q. Where is all this material at the present time?

A. It is all in my office in Cleveland.

7496 Q. From the materials supplied by the converters on up?

A. That is correct.

Q. Was all that material made available to the representatives of the Anti-Trust Division for their inspection?

A. It was, and Mr. Mitchell was in Cleveland for two weeks inspecting it, and Mr. Francis was there and Mr. Renninger was there.

Q. To what extent did you explain to them the procedure you followed in assembling the information?

A. One of my associates under my supervision explained in detail the entire process. They were taken through all our work papers and given an opportunity to inspect anything they wished.

Q. Now, will you take up these particular exhibits one at a time? The first is Defendant's Exhibit 984. I don't want to discuss the figures on the exhibit but to ask you to explain the format of it and what it purports to show.

It is entitled, "Major Material Groups by Principal End Uses." First of all, it says, "Adjusted 1951." What does that mean?

A. This schedule was adjusted after certain additional information and changes of information was supplied by two of the converters.

Q. This covers 1949?

A. Yes.

7497 Q. What does it purport to show for those nineteen converters?

A. It shows for those nineteen converters the quantity in millions of square inches of each one of these major material groups which they sold for use in these nineteen end uses.

Q. Now, you say major material groups. Is there an exhibit that shows those groups?

A. There is.

Q. In this set? Which one is it?

A. Exhibit 987 marked for identification.

Q. If you will turn to Defendant's Exhibit 987, do I understand that all of the items listed under cellophane on the first page, which is captioned, "Cellophane and combinations," appear as cellophane on Defendant's Exhibit 984?

A. They do.

Q. And similarly all the items under, "Foil and combinations," that appear on Exhibit 984 as foil?

A. That is correct.

Q. You mentioned this laminated problem a moment ago. I see you have under "Cellophane and combinations" in Exhibit 987 examples where cellophane, for instance, is laminated to glassine or where it is laminated to foil; is that correct?

A. That is correct.

Q. Why did you show those as cellophane rather than as glassine or foil?

7498 A. They had to be classified one place or another and we chose to classify those all with cellophane so that there was no question as to cellophane being under-stated in the study. That applied even in those cases where cellophane was merely a window in a bag.

Q. Do I understand that Exhibit 985 is simply a pictorial presentation of 984?

A. That is correct.

By the COURT:

Q. What are those figures on the left-hand column? What do they represent?

A. Those are percentages of the total.

Mr. GESELL. That is a scale against which you can measure the percentages.

Q. Show me how I can use that?

A. Taking candy, for example, the legend shows that the red at the bottom is cellophane. That you can read is approximately

twenty-one per cent on the left-hand scale. The green is foil. Foil and cellophane represent about fifty-five per cent, but if you take out the amount of the cellophane the foil would be around thirty-four per cent.

By Mr. GESSEL:

Q. Am I correct that the precise percentages are the percentages that appear in Exhibit 984 in the table?

A. That is correct. I should say, Mr. Gesell, that
7499 this chart was prepared before the adjusted figures. The chart has not been adjusted for those adjustments, but it is a pictorial presentation and will not vary appreciably from the figures as shown in the previous Exhibit 984.

Q. Exhibit 986, on what is that based?

A. Exhibit 986 is based on the same information. It is an assembly of all of the materials by end uses and of cellophane by end uses, merely showing in cumulative chart form here running from zero to 100 per cent the amount of each one of these end uses.

Q. It is another method of graphically presenting the data in Exhibit 984; is that correct?

A. That is correct. That chart was also prepared before the adjustment but would not vary appreciably.

Q. Defendant's Exhibit 987 we have discussed. Defendant's Exhibit 988 is entitled, "Materials sold for representative end uses by converters, year 1949."

Will you pick up the first sheet of that which relates to chocolate or chocolate-coated candy? Will you explain what that chart—I believe you called it a scatter chart—is intended to reflect?

A. That chart takes one of the detailed end uses which we had assembled and lists by converter the various materials which he converted for that end use. The codes of the converters in
7500 this table do not agree with the codes on the converters of any other table.

Q. The converter over on the next table, which relates to Variety bread, will not be the same converter?

A. It is not the same converter.

Q. To see if I read the chart correctly, taking the first page relating to chocolate-coated candy, I read that to say that going horizontally there were five who converted with P. T. cellophane?

A. That is correct.

Q. And if I went to read the chart vertically by reading down under any one of the numbers I can ascertain by the X's the number of materials which that converter in 1949 used in some amount for the purpose of converting this particular end item?

A. That is correct.

By the Court:

Q. Will you explain this to me on that line? Under Figure 1 you find an X alongside of cellophane, an X alongside of glassine and an X alongside of waxed bleached sulphite. Does that mean that that one converter used all those three items?

A. It does.

By Mr. Gesell:

Q. For this particular end use?

A. For this particular end use.

7501 Q. To what extent are these X's intended to show quantity?

A. They show quantity in no respect whatever.

Q. No matter what the amount is, big or small, an X appears?

A. That is correct.

Q. And that same system was used as to each of these sheets that make up this exhibit; is that correct?

A. That is correct.

Q. What care did you take, Mr. Bricker, in checking the accuracy of your own work in this particular study? You described the methods but to what extend did you check your results?

A. That work by some twenty members of our research and statistical department was under continuous supervision of one or more of my associates. It was audited, it was checked from time to time and when the entire study was completed it was given a thorough audit in April of this year.

Q. How much time was spent from the time you got the material from the converters would you say, roughly, on the business of getting this material together?

A. Somewhere around six months, six to seven months.

Q. Are these figures, to the best of your knowledge and information, true and correct?

A. They are.

7502 Mr. Gesell. I offer these schedules in evidence, your Honor, together with Exhibits 984, 984-a, 984-b, showing the forms which govern the compilation of the data, 985, 986, 987 and 988.

(Defendant's Exhibits 984, 984-a, 984-b to 988, inclusive were received in evidence.)

By Mr. Gesell.

Q. May I show you another group of exhibits? These are Defendant's Exhibits for identification 989 through 993, inclusive. Do you have those before you?

A. I do.

Q. Defendant's Exhibit 989 is captioned, "Comparison of du

Pont Cellophane and Waxed Paper for the Packaging of Baked Goods for the year 1949."

Defendant's Exhibit 990 is captioned, "Comparison of Cellophane and All Types of Wrapping Paper Required by 17 Large Meat Packers for the year 1951."

Defendant's Exhibit 991 is captioned, "Comparison of Cellophane, Glassine, and Waxed Paper Used by 115 Confectionery Manfacturers in 1950."

Defendant's Exhibit 992 is captioned, "Comparison of Cellophane, Glassine, and Waxed Paper Used by Two Large Bakers for Wrapping Bakery Products in the year 1949."

Defendant's Exhibit 993 is captioned, "Comparison of Cellophane and Paper Required for Overwraps and Liners
7503 for Retail Packages of Frozen Foods for the year 1951."

Do you recognize those exhibits?

A. I do.

7504 Q. Were they prepared by you?

A. They were prepared by me or under my supervision.

Q. And are the sources from which each of these schedules was prepared indicated on the foot of them?

A. They are.

Q. Are they to the best of your knowledge and information true and correct?

A. They are.

Q. Have the sources of these materials been made available to the Department of Justice?

A. They have.

Q. Now, will you take up DX-989?

A. Yes.

Q. And will you state how you got that information and what it purports to show?

A. That information, as far as the Du Pont cellophane production for the packaging of baked goods was concerned came from the Trade Analysis Section of the Du Pont Company, Film Department.

The information on waxed paper came from Consolidated Industry Report of the Statistical Program of the Wax Paper Institute, which is compiled by Ernst & Ernst, Certified Public Accountants, from information supplied by each of the members of the Institute.

Q. Was that supplied for purposes of this case?

7505 A. No; it is supplied regularly in the course of their business, the monthly report.

Q. So, as I understand it, DX-989 is not confined to any converted materials; it covers all material?

A. It does.

Q. Direct and indirect sales, is that correct?

A. It does.

Q. Is that true of all this group of exhibits?

A. Yes.

Q. Now, what does 990 purport to show and what was the source of that?

A. 990 purports to show the cellophane and other types of paper required for the year 1951 by 17 large meat packers. This information was secured by analyzing returns made to the American Meat Institute in answer to a questionnaire issued by the Institute at the request of the National Production Authority.

Q. Well, is that where the cellophane figures came from, too?

A. They did.

Q. What about DX-991?

A. This information arose in the same manner from 115 members of the National Confectioners Association, in answer to a questionnaire at the request of the National Production Authority.

7506 Q. And what about 992?

A. 992 was prepared by analyzing the purchases of the Continental Baking Company and a summary of the inventory and use record of the General Baking Company, records kept in their course of business which were made available for our study.

Q. and DX-993?

A. DX-993 was taken from data supplied to the Production and Marketing Administration of the United States Department of Agriculture by the National Association of Frozen Food Packers.

Q. Well, now, will you state whether this group of exhibits represents a portion of the data of this kind you were able to assemble or does it represent all you were able to assemble on ultimate end use?

A. It represents all that we were able to assemble.

Q. And what search did you make for information of this kind?

A. We talked with associations of many types, we talked with Government agencies, we talked with any one who might know of such information.

Mr. GESELL. I offer these exhibits in evidence, DX-989 to 993.

(Defendant's Exhibits 989 to 993, inclusive, were received in evidence.)

7507 By Mr. GESELL:

Q. Mr. Bricker, I am reminded by Mr. McGlothlin that I neglected to ask you a question about the converter study. Where does tobacco appear in the converter study? You will recall his Honor's question.

A. The amount of packaging materials converted for use on tobacco by these 19 converters was relatively small. It applied primarily to chewing tobacco and was grouped with all other non-food products.

Q. All other non-food products, thank you.

A. I should say that is, miscellaneous non-food products.

Q. Now, Mr. Bricker, I direct your attention to two exhibits which have been marked DX-994 and 995 for identification. 994 is a graph which bears the caption, "Wholesale Price Histories of Selected Flexible Packaging Materials", and DX-995 is captioned, "Wholesale Prices of Selected Flexible Packaging Materials, 1949 Average Prices". Do you have those before you?

A. I do.

Q. Were they prepared under your direction and supervision?

A. They were.

Q. Were the sources of those schedules made available to the Department of Justice?

7508 A. They were.

Q. Are these schedules to the best of your knowledge and information true and correct?

A. They are.

Q. Well, now, will you take up first the graph, DX-994?

A. Yes.

Q. Will you state for the Court how you went about getting together this information?

A. Our first approach was to go to the Bureau of Labor Statistics and ask them to provide such information for us. They did not have it in their files, but they at first agreed to undertake a study for us.

When the Korean War came up they had to renege on that; they had other commitments that they could not undertake this study.

We then with their assistance started on to take it out ourselves. We got advice from them as to who the leading manufacturers were to whom we should go for this information and we took their form that they usually use for price histories——

Q. Whose form?

A. The Bureau of Labor Statistics. We made a form designed on those lines and went to these manufacturers, to the leading manufacturers of these materials, and asked them to provide us their price histories.

7509 Q. Well, now, so that I can, and the Court can, understand what this schedule purports to show, will you state what you mean by wholesale price histories and what it is you are attempting here graphically to portray?

A. Wholesale prices is a term which is generally used for the prices received by manufacturers for their products. We are at-

tempting to show here the broad trend of prices of these various materials over the period of time shown.

Q. Now, will you state——

Mr. GESELL. Your Honor, before I do that, there is one slight correction which I am afraid is not on your Honor's schedule. The second heavy line coming down is captioned at the beginning, "300 M. S. T." The "S." should be stricken out; it is "300 M. T." The other copies have been corrected, your Honor, but we didn't catch that in time to correct yours. That is 300 M. T.

By Mr. GESELL:

Q. Now, Mr. Bricker, will you examine an exhibit of two pages which I have marked DX-994-A, and I ask whether that is the form that you used in getting together the price information which is contained on this chart?

A. It is.

Q. Now, going down each of these lines, Mr. Bricker, will you state what each material is that is being charted here, whose prices you are using?

7510 A. Taking the first line at the left, cellophane, in fact the two heavy lines for cellophane, both are Du Pont prices.

Q. The cellophane prices shown are Du Pont's?

A. They are.

Q. Now, who do you show for aluminum foil?

A. Aluminum foil is the price of the Aluminum Company of America.

Q. And whose price do you show for vegetable parchment paper?

A. Vegetable parchment is from the Paterson Parchment Paper Company.

Q. And whose price do you show for the bleached glassine?

A. Bleached glassine is from the Riegel Paper Corporation and from MPR 567 of the OPA.

Q. And whose price is shown for plain waxed paper?

A. Plain waxed paper is from the Marathon Corporation.

Q. And whose price is shown for bleached greaseproof?

A. Bleached greaseproof came from Riegel.

Q. And whose price is shown for waxing coated opaque wrapping paper?

A. That is from Consolidated Water Power & Paper Corporation.

Q. By the way, what is waxing coated opaque wrapping paper?

7511 A. That is a waxing stock which has been made opaque prior to waxing. It is sold to a converter and is then waxed, usually used for bread wraps.

Q. Well, when it is waxed is it sold as plain waxed paper?
A. No, it would be opaque waxed paper.
Q. Whose price is shown for Saran?
A. That comes from the Dow Chemical Company.
Q. Whose price is shown for pliofilm?
A. Pliofilm is the Goodyear Tire & Rubber Company.
Q. Whose price is shown for polyethylene?
A. Polyethylene is from Visking Corporation.
Q. I notice that each of these lines charts simply a particular grade or type of one of these materials?
A. It does.
Q. Will you state the basis used in selecting the particular material?
A. Each of these materials is a principal standard material of that type—in other words, 25 pound bleached greaseproof is typical; it is the principal standard greaseproof material.
Q. I neglected to ask you whose price is shown for cellulose acetate?
A. That is the Eastman Kodak Company.
Now, what does this graph purport to show?
7512 A. It purports to show the price trend of these particular grades of materials over the years for sale to the largest group of customers of that company.
Q. Who determined the largest group of customers of that company?
A. The company.
Q. And why is it done on that basis?
A. That is the normal practice of the Bureau of Labor Statistics in preparing its price series.
Q. To what extent did you consult with the B. L. S. in the preparation of this material?
A. We consulted with them to a considerable degree, reviewed the material with them.
Q. On whom did you rely in selecting the particular grades that are shown here?
A. We relied on the Bureau of Labor Statistics, the American Pulp & Paper Association economists, and particularly the individual companies with whom we talked. We went out to these companies and explained the whole study to them and left the forms with them to fill out so that they were entirely familiar with what we were trying to get.
Q. Now, turning to DX-995, what does that purport to show?
A. That table was prepared from the same information as the chart and it purports to show the average prices in 1949
7513 for the same specific grades of materials.

Q. Now, if you took these prices would they show the precise positions of the lines for 1949 on the chart?

A. They would be approximately at the end of the line on those charts, but since they are the average for the entire year '49 and most of these have changes in that year, you could not find the exact figure on the line.

Q. Is there any explanation, Mr. Bricker, for the fact that some of these lines on DX-994 do not run all the way over to the left?

A. There is. It is simply that the information was not available.

Q. How in a study like DX-994 is the question of discounts handled?

A. These prices that appear on here are the net of the normal discount and cash discount to the class of customers to whom the product was sold.

Q. Well, is the principal class of customers for each of these materials the same?

A. It is not entirely the same, but it is mostly to the user.

Q. Well, now, cellophane, for example, who do they show as the principal class of customer there? Are those prices to the converter or prices to the user?

A. In the case of cellophane it is prices to the user.

7514 Q. In other instances, however, is it not correct that these items frequently show price to the converter?

A. Most of them show price to the converter. Some of them, to all customers.

Q. And you have simply charted the price they showed to whomever was their principal customer?

A. Principal class of customers, yes.

Mr. GESELL. Now I offer in evidence DX-994 and 995.

(Defendant's Exhibits Nos. 994 and 995 were received in evidence.)

Mr. GESELL. I have one final exhibit which I will ask to have marked 996, which the Court will recognize as Appendix A to the offer of proof which was previously discussed in this case, and which is a compendium of physical samples of converted items.

(The document referred to was marked Defendant's Exhibit 996 for Identification.)

By Mr. GESELL:

Q. I ask you whether this material was assembled under your direction and supervision and whether the schedule which I hand you, which will be marked DX-996-A, is a schedule showing the source from which each of these items was obtained.

(The schedule referred to was marked for identification Defendant's Exhibit No. 996-A.)

7515 A. It was prepared under my supervision, and this is the source.

Q. Now, will you state in a general way how you went about the business of assembling these physical examples?

A. We went to a number of the converters and asked them to provide us with samples from their current production or their regular sample stock of wraps used for various end uses and made of various materials.

Q. And you selected these from a group they gave you, is that correct?

A. Yes.

Mr. GESELL. I would like to offer at this time DX-996 and DX-996-A.

Mr. MINICUS. I would like to have a copy of 996-A, your Honor.

(Copy of 996-A handed to Mr. Minicus.)

Mr. MINICUS. Thank you, sir.

(Defendant's Exhibits Nos. 996 and 996-A were received in evidence.)

Mr. GESELL. I would like to also offer in evidence the exhibit previously discussed, DX-994-A.

(Defendant's Exhibit No. 994-A was received in evidence.)

By Mr. GESELL:

Q. Mr. Bricker, will you look at 996 and find for the Court an example of printed sulphite. Will the schedule help

7516 you?

A. It might, yes.

Here is one [indicating], sulphite coated one side, printed sulphite.

Q. As of what end use was that particular example?

A. Chocolate candy. Here is another one, Planter's Peanut Candy [indicating].

By the COURT:

Q. By the way, what is this [indicating]?

A. That is cellulose acetate.

Mr. GESELL. We are sure we use a Du Pont product, your Honor.

You may examine.

Mr. MINICUS. Your Honor, this is entirely at your own discretion, but might we suggest, as long as we started a half-hour earlier this morning that we recess for lunch a half-hour earlier and convene a half-hour earlier than usual.

Mr. GESELL. It is quite all right with me, your Honor. It might cut down the cross-examination.

The COURT. We will recess until 1:45.

(At this point a recess was taken until 1:45 o'clock P. M., the same day.)

7517 Present: As before noted.

GEORGE W. BRICKER (resumed).

Cross-examination by Mr. RENNINGER:

Q. Mr. Bricker, earlier this morning we were discussing the estimate of the vegetable parchment figures for certain years. Will you please turn to Defendant's Exhibit 981, page 2, and explain how those vegetable parchment figures were estimated?

A. As I think I explained before, Mr. Renninger, the vegetable parchment figures were estimated by taking the proportion, the ratio, which vegetable parchment bore to glassine and greaseproof in the years 1942 to 1946, applying to the certified figures on glassine and greaseproof for the years 1925 through 1941.

Q. Mr. Bricker, how can you say that the figures for these war years on glassine, greaseproof and vegetable parchment are a good basis on which to base your estimates of vegetable parchment for, say, the year 1925 or other years prior to the war?

A. It was the consensus of the people in the industry
7518 and at the Bureau of the Census that that was as good an estimate as could be made and it was fairly representative.

Q. Is it not true that the production figures for glassine and greaseproof during the war years increased tremendously over prior years?

A. It is. It is also true, I believe, that all paper products increased during those years.

Q. Did vegetable parchment production figures increase during the war years?

A. I believe they did. The percentage in each year was practically the same for the five years 1942 to 1946.

Q. Now, Mr. Bricker, on this same exhibit, Defendant's Exhibit 981, page 2, under aluminum foil, I believe you previously stated that you had certain figures for which your estimated aluminum foil figures were based. From what source were those figures obtained?

A. These figures were obtained from three different sources for certain years. They came out of the record of the Alcoa case.

Q. May I ask what years?

A. For the years 1933 to 1939. In that case were also figures for Reynolds prior to that. I have forgotten the exact years. We have a certified figure from the Bureau of the Census for 1947. We have a figure for the Aluminum Association for 1950.

7519 Q. Did you use the figure that you obtained from the Bureau of the Census in 1947?

A. Yes.

Q. As given to you by the Bureau of the Census?

A. To the best of my recollection, yes.

7520 Q. Is it not true, Mr. Bricker, that the 1947 census figures given you by the Bureau of Census were changed somewhat?

A. My associate informs me there was a change in that, and that was from a further figure that was given to us by the Census.

Q. In other words, the 1947 figure to a certain degree is an estimated figure?

A. It is not. A change was made by the Bureau of Census in an additional document which was given to us by them.

Q. Did they say that was a true and correct figure?

A. They did.

Q. Did they not say that it was an estimated figure?

A. Many figures in the Census are estimated by the Census Bureau, if I remember rightly. They have means of estimating and they have control of the figures, and you will find many figures marked in their Census Reports, estimated.

Q. Now, as I understand it, Mr. Bricker, for the years 1933 to 1939 you used the figures which were taken from the ALCOA brief in the Aluminum Company case, is that correct?

A. That is correct.

Q. How did you estimate the figures first from 1925 to 1928?

Mr. GESELL. For what?

Mr. RENNINGER. For aluminum foil. That is what I

7521 have been talking about.

The WITNESS. Those figures were estimates based on conversations with people in the industry. They are of minor importance. We put figures in because we were informed there was some production in those years.

By Mr. RENNINGER.

Q. You just put certain figures in because you were informed that there was some production for those years?

A. And these figures were stated to be approximately what it was.

Q. How did you estimate the figures for the years 1929 to 1932 on aluminum foil?

A. Those were estimates based on conversations with people in the industry and supported also by the actual figures of Reynolds' production. These figures were higher than Reynolds' production.

Q. You had Reynolds' production figures but that is all that you had for the years 1929 to 1932, is that correct?

A. That is correct.

Q. And from those figures, from Reynolds, you also added an additional poundage which you had estimated?

A. That is correct.

Q. Going back again to the poundage figures that you used for the period 1925 to 1928, you say that that is entirely an estimate based upon conversations with people in the trade?

7522 A. That is correct.

Q. Well, then, how can you say on your chart, that is, Defendant Exhibit 981, that these estimates were based on available official statistics and records of individual companies kept in the normal course of business?

A. They were based on what was available.

Q. What was the basis for these figures from '25 to '29?

A. Based on conversations with people in the industry who knew but had no actual records to refer to.

Q. Is that what you state in Defendant's Exhibit 981, page 2?

A. My understanding of the words used in that would cover such a situation, yes.

Q. It would cover that situation?

A. Yes.

Q. Where are any available official statistics and records in that instance?

A. There are none.

Q. Well, isn't that a misrepresentation?

A. No. They are available in other years and——

Q. I am speaking about this period from 1925 to 1929?

A. The estimates were based partly on the production which occurred later and the trends that were to be applied to that.

7523 Q. You just previously stated it was based on what you heard in the trade.

A. That is correct, but we have information, we have statistics later than that. We knew it was a growing industry, the people in the trade knew it was a growing industry.

Q. As for the period from 1925 to 1929 it was not based on any official statistics of any company or anyone else?

A. Not for those years themselves, but based on later figures projected back.

Q. Now, for the period relative to aluminum foil for the years 1940 to 1944, how did you estimate those figures?

A. Those figures are based on available statistics at the Alcoa Company and on conversations with them and with other people in the industry.

Q. They represent, these figures from 1940 through 1945, represent Alcoa's figures plus an estimate of the rest of the production; is that correct?

A. That is correct.

Q. For how many years did you have figures available from the Aluminum Company of America?

A. From 1933 to 1944.

Q. 1944 only?

A. I said from 1933 to 1944.

Q. You did not have figures from the Aluminum Com-
7524 pany of America after 1944?

A. I did not.

Q. Mr. Bricker, I show you this letter here which purports to be a letter from the Aluminum Company of America addressed to Mr. W. S. Egekvist dated November 10, 1950. Will you please tell the court what that letter states? Just read the letter.

A. This letter states——

The COURT. Just a minute, Mr. Witness. I don't mean to be technical about the matter, but this document is not in evidence.

Mr. RENNINGER. No, your Honor.

The COURT. Are you going to have it marked for identification, and then are you going to put it in evidence, because I don't think the witness should testify.

Mr. GESELL. I don't mind. It is part of the material we gave them to check these figures. This is one of the letters we gave them.

Mr. RENNINGER. The only purpose was to show that Robert Heller and Associates did have these figures from the Aluminum Company of America for the periods from 1944 to date.

The COURT. I was simply being technical to have the record in accordance with orthodox principles of evidence. If you want to go ahead and talk about the letter, all right.

A. May I amend my statement? I was reading from
7525 working papers which should not record this fact; that I had forgotten about this letter.

The COURT. It is still a mystery to me. Are you going to tell me what was in the letter?

M. RENNINGER. It stated that the Aluminum Company of

Mr. RENNINGER. It stated that the Aluminum Company of America was sending to Robert Heller and Associates full production figures for the years 1938 to 1949, inclusive.

By Mr. RENNINGER:

Q. Since you had the production figures from the Aluminum Company of America from 1938 to 1949, inclusive, why did you not also base your estimates for the years 1945, 1946, 1947, 1948 and 1949 on these figures as you had in the past?

A. If I may consult with my associates I can find out the reasons for that.

Q. I am asking you this question, Mr. Bricker. You stated that you were fully cognizant of all the facts that went on under the preparation of these tables.

A. I am fully cognizant in general with all the facts that went on. I can't be familiar with every single detail in the entire study.

Q. You stated that you did have the production figures for the Aluminum Company of America from 1938 through 1949 and that you used those figures as an estimate of the total aluminum
7526 production for the years 1940 to 1944 but not from 1944 to 1950 nor for other periods. I will amend that—just for the period from 1944 to 1950.

Mr. GESELL. I am so completely lost as to what this examination is about, the witness must be, too. I move to strike that question as being impossible to understand.

Mr. RENNINGER. The real purpose is to show that in certain years he used Alcoa's figures for estimating the total production and in other years he did not although he had the Aluminum Company figures for other years.

The COURT. What is your contention of the range of error in these figures? Is it appreciable, is it vital, is it critical?

Mr. RENNINGER. That I don't know, your Honor. In our limited [illegible] of the material that we received it is impossible to tell. I wo[illegible]to have some estimate from Mr. Bricker.

Mr. GESELL. Your Honor, may I interpose in this?

The COURT. Yes.

Mr. GESELL. On two points of fact: One is that every working paper underlying this schedule was in the hands of the Government.

Fact No. 2: The witness has now twice testified that only figures amounting to five per cent of the total over this whole period were figures based on estimate and that in 1947 one-tenth of one per cent was based on estimate, so you have a measure of it in the record.

7527 Mr. MINICUS. I might answer that by saying the witness just testified a minute ago he did not know what estimates he was using. He didn't know he had certain figures here, so I don't think he could accurately state what percentage of this is based on estimates.

Mr. RENNINGER. Not only that, your Honor, he also stated that as to aluminum the figures were based on available official statistics or records of individual companies and later he testified that for the years 1925 to 1928 he didn't have any figures from any companies or from any individuals.

The COURT. Proceed, Mr. Renninger.

By Mr. RENNINGER:

Q. How were your estimates made as to aluminum foil for the years 1945 to 1950?

A. Those estimates were made based on conversations in the industry, on a Census certified figure for the year 1947 and on a

figure from the Aluminum Association for 1950. They were interpolations between those figures.

Q. In other words, for the period from 1945 to 1950 you had a figure from the Aluminum Company of America for 1947 and you had a letter from the Aluminum Association for 1950, and in between you just estimated the difference?

A. The estimate was based on what was considered to be the general trend in that period. I find here on another sheet in my working papers these figures of the Aluminum Company
7528 up to 1949. They were taken into consideration.

Q. Well, Mr. Bricker, what I cannot understand, since you had Aluminum Company figures for the whole period why did you just take one year—that is, for the whole period from 1944 to 1950—why did you just take one year, '47, and take another figure from the Aluminum Association in 1950 and then use those two figures on forming a basis of an estimated production figure for '45, '46, '48, and '49?

A. Because the information which we received in talking with the Reynolds people, with the Aluminum Company and with the Association indicated that we had best take an estimate based on these trends.

Q. In other words, although you had production figures from the Aluminum Company for the period 1945 through 1949, you just took the year 1947 as a basis of a trend and didn't use the other figures on which to base an estimate?

Mr. GESELL. Is that a statement or a question, Mr. Renninger?

Mr. RENNINGER. It is a question. I am expecting an answer.

The WITNESS. I don't know how to answer that question to make clear the point that these estimates were made in the best possible way that we knew how.

By Mr. RENNINGER:

Q. Let us turn now to cellulose acetate, Mr. Bricker.
7529 As I believe you testified, these production figures were based upon official statistics that you obtained from the various companies involved, is that correct?

A. That is correct.

Q. What all types of cellulose acetate do these figures include?

A. They include cellulose acetate film under three thousandths.

Q. Does it also include cellulose acetate butyrate?

A. It does.

Q. Is that used as a packaging material?

A. It is, to the best of my knowledge.

Q. In what industries?

A. I cannot tell you.

Q. You don't know?

A. I know what it is used—it is sold for that purpose.

Q. It is sold as a flexible packaging material but you have no idea as to what use it is sold for?

A. I don't recall. I can go into my working papers and see if I can find it for you, if that is important.

Q. Were these production figures, Mr. Bricker, that you received from the Eastman Kodak Company, for instance?

A. They were annual shipments which closely approximated their production figures.

Q. Now, with relation to Saran on this same chart, Mr.
7530 Bricker, how have you computed the production of Saran film?

A. That was taken from a tabulation prepared by the Dow Chemical Company.

Q. Does that include all types of Saran film, Mr. Bricker?

A. I don't have the tabulation and the covering letter with me here. I can't answer that thing categorically.

Q. You don't know then what production, what types of Saran film are included in this table?

A. I don't remember.

Q. Well, if you don't remember, you don't know, isn't that correct?

Mr. GESELL. No. Now, if your Honor please, the witness was instructed by Mr. Renninger not to consult his associates with respect to these matters. It is not fair to put him in the position that he is being put into now.

The COURT. Will you read the question, please?

(The Reporter read the last question.)

By the COURT:

Q. Are you in a position to answer that question, Mr. Bricker?

A. I feel that my memory is a matter of my personal memory. My working papers are part of what I know.

By Mr. RENNINGER:

Q. Well, Mr. Bricker, there are types of Saran film
7531 that are not used as a flexible packaging material, is that not true?

A. I believe that is true.

Mr. MINICUS. May I state, your Honor, if Mr. Bricker wants his working papers, we will send one of our associates back, if he has them in the courtroom, bring them up to him, if they are his working papers.

(Mr. Minicus received papers and was about to hand them to the witness.)

Mr. GESELL. Can't they be handed to him by our own group?

Mr. MINICUS. You may, sir.

Mr. GESELL. You have copies of them.

Mr. MINICUS. Certainly. Go ahead and hand them to him. The last time they were brought up that way there was a consultation and I wanted to avoid that this time. I didn't say anything about it the first time.

The COURT. I am not getting the significance of this point.

Mr. GESELL. Your Honor, I was going to ask for an instruction from the Court to the witness that he may consult with his associates who worked on this job to find in the working papers what he needs.

The COURT. It is my understanding of the law you can consult anything to refresh your recollection, even if it
7532 is yesterday's newspaper.

Mr. GESELL. Of course, and an expert can consult his associates in a job of this kind.

Mr. MINICUS. We are not challenging the consultation of the papers, we offered to get them. What we are challenging is the witness consulting with an unsworn person from the witness stand.

The COURT. I think that is a proper objection, Mr. Minicus.

Mr. MINICUS. That is all we are trying to avoid. It happened once and I did not say anything about it, but I do not want it to happen again.

The COURT. Today?

Mr. MINICUS. Yes.

The COURT. I did not observe it.

Mr. GESELL. Let's find out who it was, swear them in and find out what he said. I am not going to have anything said here which might affect the credibility of the witness. Who was the gentleman?

Mr. MINICUS. I think it is very unimportant.

Mr. GESELL. Then don't press it.

Mr. MINICUS. Mr. Gesell criticized my conduct in intercepting the messenger this time and in bringing them up myself. I wanted to justify my conduct on that.

7533 The COURT. Let us pass the thing. You go on, Mr. Witness, and see if you can refresh your recollection. If you cannot, we will take some other course.

Mr. Renninger, my difficulty is, I am not getting the point you are trying to urge. What is it?

Mr. RENNINGER. In reference to Saran film, your Honor, there are various grades of Saran film. Certain types of Saran film are for use and can be used as flexible packaging materials. Other types of Saran film cannot be used as flexible packaging materials.

The COURT. From that what are you trying to draw?

Mr. RENNINGER. I am trying to find out whether this table includes the types of film that are not flexible.

The COURT. I have your point.

The WITNESS. The information coming from the Dow Chemical Company says that from 1943 through 1946 the only Saran film produced was a type suitable to metal parts packaging only, and this was used by the military primarily. From 1946 through the present a Saran film suitable for food packaging has been developed and used.

7534 By Mr. RENNINGER:

Q. I am speaking as to the total production figures you have used here. Have you used all types of saran film in computing the tonage or the poundage of the saran film?

A. My understanding of these figures is that these are figures for the production of a film suitable for packaging material.

Q. You don't know whether it is a total production or not, then?

A. They state that it is—the heading on the page is "Total production." But their letter would indicate that they were made an estimate of the amount in 1946 which was for packaging versus any other type, and that since then their figures are complete for packaging material. They say it was during 1943 to 1946 that the film was for metal parts packaging only and used by the military.

Q. You have used the total production figures?

A. As reported by them, and I understand those to be packaging film.

Q. As to rubber hydrochloride, how did you estimate the production of that item on this same exhibit?

A. That was a part of the pliofilm production prepared by the DuPont Film Department Trade Analysis Section from their annual estimates made in the normal course of business.

7535 Q. In other words, the figures here are estimates based on DuPont's salesmen's trade reports; is that correct?

A. Based on the files of the Trade Analysis Section, made by them.

Q. Polyethylene films. How were those production figures arrived at?

A. They were estimated production prepared by the DuPont Poly-Chemical Department as to the amount of flake which was used in making film.

These are the best estimates we were able to find of these materials. They appear only for the years 1947 and 1949. They amount to a very small part of the entire table.

Q. This survey is aimed at pointing out DuPont's statistical position in the market, is it not?

A. It is pointing out the production of these materials which were used in the same markets that cellophane is used and for the same purposes.

Q. I am having difficulty in finding out what you call the market.

A. This is simply a listing of materials which are used for the same purposes that cellophane is used, and that primary use is pre-packaging of retail packages.

Q. This market here is the United States market of selected pre-packaging for retail packages, flexible packaging materials?

7536 A. It is what the title says, "Selected flexible packaging materials," and those materials are materials which are used for the same purposes as DuPont cellophane.

Q. You say it only relates to those that are used for pre-packaging; is that right?

A. These materials are used for other purposes to some extent, but they are used mainly for pre-packaging of retail packages.

Q. Are all of these products listed or used for all the purposes that cellophane is used for?

A. Possibly not, but I think they are.

Q. Do you know?

A. When you ask that question you are asking for an infinitesimal selection of what possible uses one might have that another one might not have.

Q. Mr. Bricker, will you turn to page 3 of the same Exhibit 981? This, I understand, represents production of imports, I mean, import figures; is that correct?

A. This represents imports, yes.

Q. Defendant's Exhibit 982, page 2, what does this chart represent?

A. This represents the same information as is contained on page 2 of Exhibit 981 converted to an area basis, thousands of square yards.

Q. How is the area basis arrived at or upon what was it

7537 based?

A. It was based on average basis weights of wrapping papers supplied by Dr. Louis Stevenson, Economist of the American Pulp and Paper Association, which we then checked with members of the trade, and members of the industry and to the reasonableness of those figures. Twenty-five pound weight for glassine and greaseproof. We feel is a reliable average for those papers. The thirty-five pound weight is a reliable weight for vegetable parchment. The thirty-five pound weight is a reliable weight for the sulphite bag and wrapping papers.

In the case of the aluminum foil, pliofilm, polyethylene and saran, we got from the manufacturers of those materials their estimate of the average gauge or basis weight for those materials.

Cellophane was taken from the records of the DuPont Company. Sylvania cellophane was assumed to have the same average gauge as DuPont cellophane. Cellulose acetate and Cry-O-Vac was reported to us by the manufacturers in area sales pounds.

Q. As to aluminum foil, where did you obtain the average yield of 20,000 square inches per pound?

A. That came from the Aluminum Company of America.

Q. There are other basic weights, are there not, as to veg-
7538 etable parchment, glassine, greaseproof or waxing paper and so forth?

A. There are, both lower and higher.

Q. Under vegetable parchment I notice you have taken a thirty-five pound basic weight figure. I understand you to say that that was given to Stevenson as the average weight?

A. That is correct.

Q. Do you consider this thirty-five pound weight to be a good figure to use?

A. We have checked that with manufacturers of the material. We feel that is.

Q. Did you use a thirty-five pound vegetable parchment paper on your price study?

A. The twenty-seven pound parchment on the price study.

Q. Why did you use that weight on the price study and the thirty-five pound weight here?

A. Twenty-seven pound is one of the largest selling items in the field, but there is much heavier than that and as you go up in weight you increase that average. This average does not mean the largest selling item. This means the average basis weight for all the materials sold.

Q. What did Dr. Stevenson state to be the basis weight of imitation vegetable parchment?

A. I don't recall that we asked him that.

Q. Mr. Bricker, can you obtain a copy of the letter that you received from Dr. Stevenson as to the average basis
7539 weights to use?

A. I don't recall whether we have a letter from him or whether it was a call.

Mr. RENNINGER. Do you object if I give him this copy?

Mr. GESELL. No, we have already given it to you once. Why don't you show it to him? Move on.

A. We did ask him for it. I said I didn't recall.

By Mr. RENNINGER:

Q. What does it say is the average basis weight for imitation parchment?

A. It says for grocers, imitation parchment thirty-five pounds.

Q. That is the same weight as vegetable parchment, the same average weight figure, is it not?

A. It is.

Q. But yet you use vegetable parchment and did not use imitation vegetable parchment in this production chart?

A. Imitation vegetable parchment is included in the census figures with grocers paper.

Q. Is it included in your chart?

A. We don't have the figures on imitation vegetable parchment in there.

Q. But it is not available to you?

A. Included with grocers, I believe. I don't believe
7540 they are broken out. I may be wrong.

Q. You could have estimated it as you estimated so many of these other products?

A. We had no desire to estimate it.

Q. Why did you include imitation vegetable parchment along with vegetable parchment?

A. Because the Census does not include the two things together. They don't break it out.

Q. That is the only reason you did not use imitation vegetable parchment?

A. We selected certain groups for which information was available which are principally used for the pre-packaging of retail packages.

Q. This chart represents those that are—what is it?

A. Principally used for the pre-packaging of retail packages.

Q. Pre-packaging of retail packages. Mr. Bricker——

A. I wonder if I might say something, Mr. Renninger, to clear up a possible misunderstanding as to one of my answers this morning? I may have left the impression that we were told by the Census specifically to leave out a particular paper tissue I believe you were speaking about. I want it understood that my answer to that was we had talked to the Census about that and
that there was no specific instruction that we should leave
7541 it out of this schedule.

Q. Was there any instruction from them that you should include it in it?

A. There was not.

Q. Did they tell you what you should or should not include in the study?

A. They did not. They talked with us about the uses of these materials.

Q. And they suggested these particular items that you used here?

A. They told us these materials were used for the purposes for which we were looking.

Q. Did they also tell you that imitation vegetable parchment or wax paper eighteen pounds and under and butchers papers and wrapping papers were also under the same classification?

A. Were not used primarily for these purposes.

Q. For what purposes?

A. For the pre-packaging of retail packages.

Q. Whatever that is.

Mr. GESELL. Is that a question, Mr. Renninger?

Mr. RENNINGER. No, it is not.

The COURT. That is an aside.

By Mr. RENNINGER:

Q. Mr. Bricker, would you please turn to Defendant's
7542 Exhibit 983?

A. Yes.

Q. I just wish to clear up one point. The production figures given there, rather, the sales in thousands of dollars for 1949, what do those sales figures there represent under all the companies?

A. Sales are total sales of the company.

Q. That does not necessarily mean it represents, like under Riegel Paper Corporation, it does not represent total sales of glassine and greaseproof, waxing papers and other specialty papers?

A. It probably does in that case.

Q. What about the other companies listed there?

A. Certain of these companies are engaged in producing only these materials that are listed. Other ones are engaged in producing other materials. Good Year, for example, produces in addition to pliofilm rubber tires.

Q. In the case of the Good Year Tire and Rubber Company, that probably would represent a very small percentage?

A. That is correct.

Q. Of their net sales, pliofilm.

Mr. Bricker, I ask you to turn to the converters survey, Defendant's Exhibits 984 to 988, inclusive. This, I think, is what you call the converter survey, is it not?

A. That is correct.

7543 Q. And that you have used nineteen converters in this converter study?

A. We have.

Q. How important are these nineteen converters used in this converter study?

The COURT. Important to whom?

Mr. RENNINGER. Important in the conversion field.

A. They are generally the principal converters.

7544 By Mr. RENNINGER:

Q. Of all products?

A. Of all products.

Q. Of all wrapping materials?

A. That is correct. There are some of the largest ones who did not participate in the study.

Q. Well, what proportion do these 19 converters represent with reference to all converted material?

A. I can't give you offhand any estimate on that. I have already stated that we estimated that over two-thirds of cellophane was included in here.

Q. Two-thirds of cellophane was included. Two-thirds of what cellophane?

A. Of all cellophane.

Q. Of all cellophane?

A. Yes—all cellophane sold to converters.

Q. All cellophane sold to converters. Do you know what percentage of the total amount of cellophane sold represents cellophane sold to converters?

A. In the case of the Du Pont Company it is about one-third, I believe.

Q. Well, would you say that these 19 converters represent a substantial portion of all converted materials?

A. I would.

Q. What do you mean by substantial?

7545 The COURT. What do you mean by it, Mr. Renninger?

Mr. GESELL. You used it in your question.

Mr. RENNINGER. I am asking him what he means.

The WITNESS. This is a substantial study. It is a substantial sample.

By Mr. RENNINGER:

Q. It is a sample then?

A. It is. It is not every converter.

Q. Well, do you consider these 19 companies to be a cross-section then?

A. I do.

Q. And represent all of them?

A. I do. I believe they are a fair representation of the entire converting industry.

Q. Have you made any statistical tests as to how reliable this is?

A. The reliability of it is that we are convinced we have a good

sample, a very substantial sample of the converting industry. From there on the figures are what those converters used.

Q. Well, what degree of reliability do you believe this cross-section possesses as to all other companies in the so-called converter universe?

A. How do you measure it?

Q. Well, have you made any tests of dispersion? Have
7546 you made any statistical tests as to stratification? Have you made any tests as to geographical distribution?

A. Yes. These cover the entire country.

The COURT. Would you read the question to me.

(The Reporter read the question as follows:)

"Question: Well, have you made any tests of dispersion?"

The COURT. Just a minute. What is that? What is dispersion?

Mr. RENNINGER. I will ask Mr. Bricker to explain.

The WITNESS. It is your question.

The COURT. I have to understand what you are talking about.

Mr. RENNINGER. A statistical test of dispersion has to do with the total square inches of all converted products in relation to the square inches contained in such a study of this nature.

The COURT. Would you read the next part of the question.

(The Reporter read the next part of the question as follows:)

"Have you made any statistical tests as to stratification?"

The COURT. What is stratification?

Mr. RENNINGER. Stratification has to do, your Honor, with the important converters in each field. Take glassine.
7547 Has he considered all the important converters in the glassine field, the waxed paper field, the vegetable parchment field? That is stratification. I am asking him if he has made any sample tests so as to know what percentage or what degree of reliability this is.

The COURT. Now I understand the third part of the question. So now go back to the original question.

(The Reporter then read the question as follows:)

"Question: Well, have you made any tests of dispersion? Have you made any statistical tests as to stratification? Have you made any tests as to geographical distribution?

By Mr. RENNINGER:

Q. Let us first take up the test of dispersion. Have you made any test to try to estimate the degree of reliability as to this cross-section?

A. We were unable to get any information on the total quantity of materials converted. This is still a good sample.

Q. How do you know it is a good sample?

A. We know from contact in the field that these people represent a big section of the converting industry. We know that we do not have the Pollach Paper Company, probably the largest wax paper company in the country, the largest converter of glassine. We do not have the Riegel Paper Corporation which converts a large amount of its own glassine. There are a number of other converters who are large in their field that we
7548 do not have. But we do have many converters converting every one of these materials and we were sure that we got a large part of cellophane, and we did get two-thirds of the cellophane converted by converters. Other materials are probably much lower in percentage. The study has more cellophane in it, we believe, than it has of the other materials as to their proportion of the total converted.

Q. What are some of the important converters of glassine that you have not included in this study?

A. I have mentioned Pollach Paper Company and Riegel. Most wax paper converters convert some glassine. There is Central Wax, there is Wrapping Wax—there are several more fairly large wax paper converters.

Q. But you have no idea as to how many wax paper converters you have eliminated from this study?

A. Yes. There are probably 50 wax paper converters in the country. I have not actually counted them on a wax paper basis. I think we have around 10 that are relatively speaking called wax paper converters. That is subject to check because that is a guess right off the stand here.

Q. As to vegetable parchment, how many vegetable parchment converters do you have in this study?

A. Without checking from the working papers, I cannot tell you how many of these converters converted vegetable parchment. We have one manufacturer of vegetable parchment
7549 who converts his own material.

Q. I would like to know, Mr. Bricker, how many vegetable parchment converters you have in this study?

A. That can be gotten out of my working papers. Do you wish me to take the time to do that now or would you rather have it at some other time?

Mr. GESELL. Let's do it now, your Honor. I don't like to have a lot of loose ends hanging here.

By Mr. GESELL:

Q. May I inquire, Mr. Bricker, are those papers here?

A. I would have to go through a tabulation of the entire study and pick it out from the papers that are here.

By Mr. RENNINGER:

Q. You mean you do not know?

A. I do not remember at this point. Vegetable parchment is a relatively unimportant item in this whole thing.

Q. Oh, it is unimportant?

A. In this converter study there is not much vegetable parchment. This is a study of 19 converters, what they converted.

Q. Well, then——

Mr. GESELL. Just a minute, Mr. Renninger. Do you want him to consult his working papers and find out?

Mr. RENNINGER. Not if he is going to have to go all through that.

7550 Mr. GESELL. As long as that is clear on the record.

By Mr. RENNINGER:

Q. Well, then, how can you say that you have made a test as to reliability of this survey? You don't even know how many vegetable parchment converters you have in here?

A. Mr. Renninger, if I were making a market survey for a company going in the business, I would consider this a very reliable basis on which to base his conclusions as to what he was going to come up against.

Q. In any event, you have not made any test of reliability as to the reliability of this cross-section of the universe?

Mr. GESELL. Well, I do not understand "the universe", your Honor. I object to the question. There is no proof that there is a universe.

The COURT. I do not feel qualified to pass on that question.

Mr. RENNINGER. I am trying to determine, your Honor, as to the reliability of this cross-section which he states is a part of the flexible packaging material field. He states according to his own opinion, I believe, that this is a good cross-section, but I am trying to determine from him how he has determined that this is a proper cross-section of the universe—cross-section of the total converter field?

The WITNESS. Mr. Renninger, the cross-section was
7551 determined before the study was made. The cross-section was determined by picking a representative group of converters. Have I any standard that you can find—you will not be able to find a group of converters that is any more representative than this, of the converting industry. I am convinced of that. And I have been traveling around to these converters and talking to them for eighteen months now. And this is what they sell. These are the products they buy and the products they sell.

By Mr. RENNINGER:

Q. How many wax paper companies have you selected on this converter survey?

A. There are eight wax paper converters.

Q. What are those eight wax paper converters?

A. Nashua Gummed and Coated Paper Company, Oneida Paper Products Company, Fabricon Products, Kalamazoo Vegetable Parchment, Marathon Corporation, Waxide Paper Company, Western Waxed Paper Company, Dixie Wax Paper Company.

Q. When you speak of a wax paper converter, you mean any one who converts wax paper?

A. I use the term in the general sense that that is the way he is known, that is his principal business.

Q. How many wax paper converters do you estimate there are in the United States?

A. About fifty—there may be many smaller ones but
7552 there are about fifty that I know of.

Q. Is it not true, Mr. Bricker, that there are thousands of wax paper converters in the United States?

A. There may be many hundreds of small ones, but there are recognized about fifty major converters.

Q. And you have used about eight, or seven?

A. We made a spot check as to how much waxed paper we had in the study, and we have about 24% of all waxed paper.

Q. Now, Mr. Bricker, in making this converter survey, the various companies that you called upon and arranged for their compilations had various items that they manufacture. I presume that there were certain instances where you included certain items in your converter survey of a particular manufacturer and other instances where you excluded other items from your converter survey, is that true?

A. Certainly.

Q. Would you give me some examples of the materials that might be excluded from your converter survey?

A. Yes. At Milprint they make bottle labels. They make advertising pieces. They do a general printing business at Milprint, print letterheads and so forth. All of that was excluded from this study. The examples are of a similar nature. For instance, at Dobeckmun they make this so-called zip tape, which is the little red lining piece around your cigarette pack that
7553 tears that apart; that is made there. That is not included in this study.

Q. Now, Mr. Bricker, I believe the Union Bag & Paper Corporation was one of the converters from which you received

their production figures as to various of their products, is that correct?

A. That is correct.

Mr. RENNINGER. Your Honor, I have a chart here I would like to use just for exhibition purposes.

Mr. GESELL. I would like to come around and watch that, too.

By Mr. RENNINGER.

Q. Will you please point out to me, Mr. Bricker, some of the principal items on this chart that you included in your converter survey and some of the principal items that you excluded?

A. I would like to make a statement about this, Mr. Renninger. This is an advertisement of Union Bag & Paper Company to show its entire line of products. It is primarily a kraft paper manufacturer making grocery bags and large multiwall bags and cartons. It has one plant, its oldest plant at Hudson Falls, New York, which is a specialty bag manufacturer. It uses some small amount of kraft, shipped from its mill in Savannah, Georgia. The rest of the products made at Hudson Falls are from papers that are purchased outside of Union Bag & Paper Corpora-
7554 tion, including glassines, white candy paper, bleached kraft, and cellophane, also cellulose acetate—it is only the production of the Hudson Falls plant of Union Bag & Paper which is included in this study. Union Bag happens to have been a client of ours in years past. I am thoroughly familiar with the Hudson Falls operation.

7555 By Mr. RENNINGER.

Q. Will you now answer my question, please, Mr. Bricker?

A. This sugar bag is possibly included if it is manufactured at Hudson Falls. If it is manufactured at Savannah, it is not included. I can't tell from here where these are manufactured because there is some change in their manufacturing arrangements. These small packages here are the ones, generally speaking, which are made at Hudson Falls.

Q. Take this twenty-five pound sack of Maine potatoes with a mesh window in it. Was that included in the converter study?

A. I can't say whether that is a twenty-five pound sack or not.

Q. Say five or ten pound sack.

A. I think that may be in, but I have no identification here as to where these are made on this chart.

Q. What is the ten pound Maine bag of potatoes—what material is that sack made out of, Mr. Bricker, if you know?

A. It is a window of mesh in it. It is probably a bleached Kraft from the appearance of it.

Q. And in your study that would be included under bleached Kraft; is that right?

A. I am not sure that bag is in. If it were it would be under bleached Kraft, which would be a paper.

Q. You don't know, then, which one of these products
7556 is in and which ones are not in; is that right?

A. Generally speaking, the small specialty bags are the ones that are made at Hudson Falls.

Q. Mr. Bricker, is paper bags included in this converter study?

A. Paper bags?

Q. Yes, the ordinary brown Kraft paper bag?

A. No.

Q. Is that production entirely excluded from this study?

A. To the best of my knowledge, it is. That is not a pre-packaging bag.

Q. I would like to have that point cleared up definitely, whether the brown Kraft paper bag is included in this study or not?

A. It is not. If any are in, they are in by some mischance.

Q. But you definitely state then that paper bags, that is, Kraft paper bags, these small bags, are not included in this study at all?

A. I understand you to mean the stock bag?

Q. That is right.

A. No, they are not.

Q. Do you know whether that is contrary to what we were told on our visit to Cleveland or not?

7557 A. No, I don't know whether it is. I hadn't heard anything to that effect.

Q. Mr. Bricker, will you please turn to Defendant's Exhibit 987?

A. I have it.

Q. The last page of Defendant's Exhibit 987, under papers and combinations, will you tell me what is the sixth line from the top?

A. That is Kraft, 48.

Q. What are some of the other ones along there? Is bleached Kraft in that list?

A. Bleached Kraft, I believe, is in the list, yes.

Q. Is Kraft a mesh window type similar to this type of potato bag I just showed you? Isn't that on the list?

A. I think it is. I don't see it, but I believe it is there.

Q. Is Duplex Kraft on there?

A. Yes. These are all small quantities of paper that you are mentioning and they are definitely for the small pre-packaging type of container.

Q. Now, this converter study is limited to a pre-package type of container?

A. It has to be. That is what converters make.

Q. Only these smaller types of articles; is that right?

A. It is the articles that are sold in retail stores.

7558 Q. Isn't a ten pound sack of potatoes sold in retail stores?

A. That is correct.

Q. Is that included?

A. If that is made at Hudson Falls, that is included.

Q. Would a twenty-five pound bag of potatoes be included?

A. It might. A number of those items you will find in the study is extremely small if they are there.

Q. Would a small potato bag with a cellophane window be included? How would that be computed in the production figures?

A. If it was a cellophane window it would be in with cellophane.

Q. It would be all cellophane?

A. All cellophane.

Q. Even though the cellophane window might be only a very small part of the whole bag?

A. That is correct.

Q. And all of that was included as cellophane?

A. It was. It is identified in the study as to what it is, but it is grouped on 984 as cellophane.

Q. These ten tables, Mr. Bricker, that are materials sold by representative end use, the so-called scatter charts, they are selected, I understand, from possibly several hundred end use codes: is that correct?

7559 A. That is correct.

Q. This represents a small percentage of the various end uses that might have been used in such a study; is that right?

A. It does. It represents the principal ones.

Q. The principal ones in what way?

A. In volume, total volume.

Q. Are you positive of that?

A. I didn't say that it was every one from the start of the largest one down. I said these were the principal ones.

Q. Is white bread included in this end use code?

A. No.

Q. Isn't that one of the principal ones?

A. It is. That is one that does not have very much variety of the type of product used.

Q. In fact, it is probably all one product, is it not?

A. It is principally wax paper, and there is some cellophane there, too.

Q. Now, the chart 1 on chocolate or chocolate coated candy, that was taken from an over-all end use code, was it not, entitled candy and gum?

A. It was. Rather, we should put it the other way. This was the original detailed end use code which was combined later into the total candy and gum.

7560 Q. Was that the important item in that classification?

A. It is an important item in it.

Q. Was it the largest in volume?

A. I am not sure whether it was or not. These were selected not only because they were important but because they are ones that are easily recognized by anyone.

Q. Take the scatter chart for chocolate or chocolate coated candy. There are quite a number of X's on this chart, are there not?

A. There are.

Q. They all represent a sale by the particular converter for a particular product; is that correct?

A. That is correct.

Q. The sale in this chart, the sale involved, might be one pound or it might be a million pounds for each X; is that right?

A. It might. I doubt if there is anything as small as one pound in there.

Q. But is might vary considerably?

A. You have the figures.

Q. Take the chocolate or chocolate coated candy. Is there one item in there that represents over fifty per cent of the total; one X in there that represents over fifty per cent?

7561 Mr. GESELL. Mr. Renninger, I would be glad to put those figures we gave you with the dollar amounts in evidence, which would show the dollar significance of every X in these exhibits in dollars and cents and be glad to put them in evidence. You have them all, but it might hurry us along.

Mr. RENNINGER. Your Honor, the only purpose I was attempting to draw from the cross-examination of the witness as to these scatter charts, these X charts, have to do with the proposition that one X might express ninety-nine per cent of the whole business and all the other twenty-five or thirty X's in there might be the remaining one per cent or whatever it might be.

By Mr. RENNINGER.

Q. Mr. Bricker, will you please turn to Defendant's Exhibit 994. What is this exhibit entitled?

A. "Wholesale Price Histories of Selected Flexible Packaging Materials."

Q. I am afraid I didn't quite understand exactly what you meant by wholesale prices on direct examination. Will you please explain what you mean by the word "wholesale"?

A. Wholesale is a term which has got to be used to represent the price received by a manufacturer, generally speaking. The

only opposite that I know of to it, in a general way, is retail, and retail means sold in a retail store.

7562 Q. Would wholesale prices then include converter prices, prices to converters?

A. It would, yes.

Q. Would it include prices to other users?

A. It would.

Q. And, of course, it would include prices to wholesalers. Does it also include prices to the consumer?

A. If it were sold by a manufacturer to a consumer, and I assume you mean by that the man on the street, it would be a wholesale price if it was sold from the company directly to him, but there are no cases like that in there, Mr. Renninger, I can assure you.

Q. Take, for example, the price for twenty-five pound wax coated opaque wrapping paper. The prices which you have charted here, I believe, are those obtained from the Consolidated Water Power and Paper Company?

A. That is correct.

Q. What is the price that you have used here?

A. That is the price to the converter, who was the principal class of customer in this company.

Q. The principal class of customer. It has to be the principal class of customer?

A. That is the manner in which this was prepared. That is the manner in which the Bureau of Labor Statistics prepare these wholesale price indexes.

Q. As to twenty-seven pound vegetable parchment, what

7563 are the prices quoted there?

A. To jobbers and converters.

Q. And for aluminum foil?

A. The converter.

Q. And cellophane?

A. To the user.

Q. Why didn't you take into consideration the converter discount?

A. I already explained this chart was based on the sale to the principal class of customer.

Q. Who would the principal class of customer be in this case?

A. Direct sales.

Q. Did you include quantity discounts?

A. The quantity discounts, where it says so, for the large quantity sold.

Q. Have you included the quantity discounts as far as cellophane is concerned?

A. I will have to look at my working papers to answer any further questions on this.

Q. Are those your working papers, Mr. Bricker?

A. They are.

Q. The papers that you have worked on?

A. They are.

7564 Q. For cellophane, take the year 1946. Did you allow for a quantity discount in that year?

A. There is no quantity discount.

7565 Q. Why not? Wasn't there a quantity discount allowed by the Du Pont Company for that year?

A. There was no quantity discount allowed to the consumer, the user.

Q. Who is the consumer, the user? Are you talking about the direct sales?

A. The direct sale.

Q. Like direct sales to the A & P Company, the tobacco companies of that sort?

A. That is correct.

Q. And during the year 1946 there was no quantity discount given by the Du Pont Company to this type of customer?

A. The information supplied to us on the same forms as all other information on this study shows there was no discount.

Q. Do you know whether there was or was not a discount at that time?

A. I have no other knowledge than this.

Q. And you based your chart on those figures?

A. That is right.

Mr. RENNINGER. If your Honor please, the evidence already shows that up until 1947 the Du Pont Company allowed a quantity discount provision at a subsequent discount ranging up to 10% in their sales of cellophane to users.

7566 Mr. GESELL. I challenge that statement. There is no showing that on the average sale of that year, which is the basis upon which these figures are based, any quantity discount was paid. You are trying to confuse two wholly different things.

By Mr. RENNINGER:

Q. Well, what quantity discounts did you take out of aluminum foil?

A. Do you have any particular year you are asking, Mr. Renninger?

Q. For the year 1946.

A. The price there is the base quantity at 30,000 pounds.

Q. I am asking you what discounts were allowed?

A. You asked me what quantity discount. There is a trade discount of 10%.

Q. Well, what trade discounts were allowed?

A. A trade discount of 10%.

Q. Were any other discounts allowed?

A. No.

Q. What does the trade discount mean in this instance?

A. The trade discount to the converter.

Q. Are the principal sales of this grade of aluminum foil to converters?

A. The principal customer is indicated here as 60% to other manufacturers or converters.

7567 Q. Going back to the 300 PT cellophane, I noticed on the first page of your table that there is a 5% trade discount allowed to converters. Did you allow the 5% trade discount on the cellophane prices?

A. No.

Q. Did you at any time in the computation of the cellophane price charts allow for any quantity discount or trade discount?

A. No. Cash discount is the only thing allowed. I might say this, in partial explanation of what you are driving at, I think, that on the sheet you have, it shows that 56% of the plain cellophane was normally sold to the converter. We are informed that that was a condition which took place, that percentage went up to that only in the last year or two, and prior to that, during the entire period the principal customer was the direct buyer, and we used the direct buyer throughout this price history.

Q. If the direct buyer is the principal customer, why was not a quantity discount allowed, taken from these prices?

A. The information supplied to us was that there was no such discount.

Q. Were you given actual price figures or average price figures?

A. We were given actual price figures and the dates of change.

7568 Q. And the date of the change. You were not given any average price figures?

A. No. These prices are the prices to the principal class of customer.

Q. In the year 1941 or '42 did you take any discounts at all on 300 PT or 300 MT or MST cellophane outside of a cash discount?

A. No.

Mr. RENNINGER. If your Honor please, I call your attention to Government Exhibit 5023 which gives the discounts allowed to the principal agreement accounts, direct purchasers of cellophane, in which it provides for a discount ranging from 9½% down to 3%.

Mr. GESELL. Does that show a discount, Mr. Renninger—so we have it all in the record—for the quantity of cellophane sale that is covered by this chart?

Mr. RENNINGER. This is a price chart that you have here.

Mr. GESELL. I will state for the Court it does not.

By Mr. RENNINGER.

Q. In other words, for aluminum foil, vegetable parchment, 25 pound waxing coated opaque and Saran, you have taken into consideration prices quoted to converters but on cellophane you have not only not taken in consideration the prices quoted to con-
7569 verters but also have not taken off from the price the quantity discount provision provided?

A. Do you speak about Saran?

Q. I ask you to answer my question.

A. I didn't know we had mentioned Saran before.

Q. No, I had not mentioned it until this particular question.

A. In the case of Saran the price is to the user and not to the converter. Do you wish to change your question now?

Q. I can eliminate Saran from that question.

A. In the other materials, the statement is correct, but I still say there was no discount given to us as applying to the cellophane sales.

Q. The Du Pont Company did not furnish you any discount figures for cellophane?

A. That is correct.

7570 Q. Mr. Bricker, how did you arrive at the twenty-five pound bleached glassine price figures? I notice that the price figures or the line representing the price figures starts some time in 1924.

A. That is correct.

Q. How was that price determined?

A. The 1924 price?

Q. Yes, sir.

A. That is the—let me explain the whole glassine picture. Information was supplied by Riegel as to the prices subsequent to O. P. A. We got our information on prices prior to that from M. P. R. 567. In that the price prior to 1933, the only price shown in there, was a 1921 price. That price has been extended along. There is no other information.

Q. As I understand it, you had a price for 1924; is that correct?

A. We had a price for 1921, but no further prices until 1933.

Q. No further price until 1933? So you just drew a straight line, then, from 1924 until 1933?

A. That is correct.

Q. Because you had no other price chart to go by?

A. That is correct.

Q. Of course, it is possible for the price to have varied greatly in that period?

7571 A. It is.

Q. From the period 1933 on how did you determine the prices for bleached glassine?

A. These prices from 1933 to 1936 come out of this M. P. R. 567.

Q. Does that give the actual price for the whole period, M. P. R. 567?

A. It gives prices at various points in that period.

Q. Well, let us take 1933 to 1939.

A. Only one price is quoted, 1933. The next price picked up is 1939.

Q. In 1933 what did the M. P. R. 567 regulation state?

A. It was around eleven cents.

Q. From January to November, 1933, I believe the chart gives a price of 9.75 for that period. What is the basis for the 9.75 figure during that period?

A. A statement in M. P. R. 567 to the effect that during the depression of 1920 to 1921 the average price fell $16 per hundred weight, and in 1933, reached a low of 9.75.

Q. So sometime during the year of 1933 it reached a low of 9.75?

A. That is correct.

Q. And you have used the 9.75 figure for the whole year; is that right?

A. That is correct. It continues to say that from
7572 the end of 1933 to 1939 the price at which glassine fluctuated was around $11 a hundred weight during that entire period.

Q. It fluctuated around, and you took that as the figure?

A. As the figure. This chart is supposed to show the general trend of prices of these specific grades. That is all that purports to show. The best information available was used.

Q. You say the best information available was used in preparation of these charts?

A. Yes.

Q. In March, 1942, I believe we come into the period under price control; is that correct?

A. Yes, I think so.

Q. What was the price in March of 1942?

A. 13.1 cents.

Q. Which your chart has followed; is that right?

A. Less the cash discount, which would bring it down to 12.184. The price per thousand square inches was .0075.

Q. How long did this price remain in effect, this price of 13.1 as provided for in the maximum price regulation 567?

A. Looking at my working papers I would say it was until November 25, 1944.

Q. The date of the M. P. R. 567 is November 20, 1944.

7573 A. That is correct. This is a report on previous information issued in connection with it.

Q. What was the O. P. A. price as set by M. P. R. 567 on November 20, 1944?

A. I have it down here as 13.25 cents.

Q. How long did this price remain in effect?

A. As far as I know, until November 12, 1946.

Q. Has your price chart so depicted this?

A. I believe it does.

Q. So you say that the price from November 25, 1944, until November 12, 1946, was 13.25; is that correct?

A. That is correct.

Q. Did you ever check any amendments to M. P. R. 567 for any changes in price?

A. I don't remember.

Q. If you had checked it would you have noted any changes that might have been there?

A. I believe so, yes.

Q. Have you noted any changes there?

A. I have not.

Mr. RENNINGER. If your Honor please, I would like to have the Court take judicial notice of O. P. A. M. P. R. regulation 567 and amendments thereto, particularly the amendment No. 3 dated August 2, 1946, and which may be found in the Federal

7574 Register for Tuesday, August 6, 1946, at page 8488, which gives a different price for bleached glassine.

The COURT. Just read it to the record what the price is.

Mr. RENNINGER. The prices were amended to read as follows: "Bleached glassine, 13.75."

By Mr. RENNINGER:

Q. So that this chart is not correct for that period?

A. I will be glad to correct the chart for that purpose.

Q. Let us turn to bleached greaseproof. I notice on this chart, Mr. Bricker, that the chart starts in January, 1933, and does not go back to 1924. Will you explain why that is the situation there?

A. Probably that is what should have happened with the glassine one. The glassine one got extended back and the greaseproof one did not get extended back on the basis of the 1921 price.

Q. What is the basis for the price in 1933 for bleached greaseproof?

A. The same series is used for greaseproof as for glassine. Riegel supplied the information from 1946 on. The rest was taken from M. P. R. 567.

Q. Doesn't the M. P. R. 567 also state as much about the price for the period in 1924 to 1931 to 1932 as it does for 1933 or some of the other years?

7575 A. It states a price for April, 1939 and April, 1940.

Q. What about the prices prior to that time?

Do you know how you determine your prices for bleached greaseproof?

Mr. GESELL. Just a moment. There is a question pending. You have asked him to read a long and complicated——

Mr. RENNINGER. I have been waiting for ten minutes.

Mr. GESELL. You asked him to read a regulation and he is reading it to give you the answer.

Mr. RENNINGER. I did not. I have really forgotten what the question was not.

Will you repeat the question?

The WITNESS. I will have to consult one of my associates on that as to how that figure was put in here.

By Mr. RENNINGER:

Q. You have your working papers, don't you? Isn't it in your working papers?

A. It is in the working papers, but I can't find it. I did not file these working papers, I hade someone file them for me.

Q. Mr. Bricker, if those are your working papers I don't see how your associate can help you out. You stated that you were well acquainted with this chart?

A. Mr. Renninger, I stated it was prepared under my supervision, and that I was familiar with it.

7576 Q. Oh, it was prepared under your supervision?

Mr. GESELL. Let him finish his answer. He is right in the middle of a sentence and you cut him off.

A. (Continuing.) I am familiar with it and the method by which it was prepared. I have gone over this information. I cannot find the specific figure I want at this time. I did not prepare every single figure in this entire book.

By Mr. RENNINGER:

Q. You don't know, then, how the twenty-five pound bleached greaseproof prices were arrived at in the early years, from 1933 on until the O. P. A. price that was established by the M. P. R. regulation 567; is that right?

A. I am unable to find it at this moment.

Q. You vouched for the accuracy of this chart when you put it in, didn't you?

A. I did.

Q. As to bleached greaseproof again, were there any amendments to the M. P. R. regulation as to bleached greaseproof, also?

A. I am not aware of whether there were or not.

Q. You still think this is accurate as to bleached greaseproof?

A. Until I have found wherein it is inaccurate, I still believe it is accurate.

Mr. RENNINGER. I would like the reporter to also take
7577 down at this place the price of bleached greaseproof under M. P. R. 567, Amendment 3, from the Federal Register of Tuesday, August 6, 1946, increasing the price of bleached greaseproof to $11.50 per hundred weight.

Q. Under vegetable parchment you have used a twenty-seven pound weight vegetable parchment for the price study; is that correct?

A. Yes.

Q. Did it remain twenty-seven pound weight all through the period?

A. No, it did not.

Q. What did it become?

A. Twenty-seven pound was brought out in 1942. It had been thirty pound prior to that.

Q. Why didn't you use the vegetable parchment grade that remained the same all through the period?

A. Twenty-seven pound is the grade which is principally sold today. The material which was sold prior to that for the same use was thirty pound. This is a consistent series. This is the price of so many square inches that grade twenty-seven pound sold at. This was sold as thirty pound prior to 1942.

Q. What did Dr. Stevenson say to be the average basis weight of vegetable parchment?

A. Thirty-five pounds.

Q. Why didn't you use that weight?

7578 A. As I stated before, that is the average of all grades produced. This is the principal item produced.

Q. Will you turn to aluminum foil? What grade of aluminum foil did you use for your price studies?

A. .00035 gauge.

Q. Why did you use that particular gauge?

A. That is one of the principal gauges sold for packaging.

Q. I want to be definite on this. It is one of them or it is the principal?

A. In terms of pounds it is not the principal one. In terms of area, I believe it is.

Q. You feel that it is?

A. That is what we have been informed.

Q. Are there any other grades?

A. Yes, going from .00023 up to .00015.

Q. Isn't .00035 the thinnest gauge?

A. No, .00023 is the thinnest gauge.

7579 Q. Do you have any idea how much .00035 foil is sold without lamination?

A. No, I don't.

Q. Can .00035 aluminum foil be used as a packaging material without being laminated?

A. It is sold to converters for further processing.

Q. Answer my question.

A. That is the answer.

Q. Can it be used as a packaging wrapper without lamination?

A. I don't believe it is usually used that way.

Q. This is supposed to be a flexible packaging material price study. Why would you use this particular type of foil which is normally not used as a wrapping material by itself?

A. All of these materials are further processed in one way or another before they get onto packages in many instances.

Q. In many instances?

A. Yes—I should say in most instances.

The COURT. Mr. Renninger, what are your plans for further examination? I am adjourning at 4 o'clock.

Mr. RENNINGER. I still have quite a number of questions on this chart and on the other one, your Honor.

Mr. MINICUS. We regret the length of time it is taking for this cross-examination, your Honor, and can only remind the Court——

7580 The COURT. I just made an announcement.

Mr. MINICUS. The witness spent eleven months in building this up.

The COURT. I am not attempting to curtail you in any respect.

By Mr. RENNINGER:

Q. As to cellophane, does most of it have to be converted before it is used as a flexible wrapping material?

A. I can't say what percentage is converted by the user. Much of the cellophane which is sold direct is converted by the user into bags or is printed by him—I don't know what percentage.

Q. What would be an aluminum foil comparable in gauge to cellophane?

A. I cannot state.

Q. Well, do you know the gauge of cellophane?

A. 300 gauge, but I do not believe that is in the same terms as the aluminum gauge.

Q. You don't know what the gauge or thickness of cellophane is then?

A. I do not.

Q. Well, when you selected this aluminum foil I understood you to say that you selected it because they were comparable products as to weight and thickness and uses, is that correct?

7581 A. That foil is offered for sale in the same markets as cellophane for use in packaging.

Q. Wouldn't that be true of many other products that you have not included here?

A. These are the principal ones.

Q. Is this the principal grade that is sold?

A. It is.

Q. On a poundage basis?

A. Not on a poundage basis. I did not say that. We are concerned with square inches throughout most of our study because that is the area that is wrapped. That is the important factor.

Q. Would a heavier foil be more expensive than the .00035 aluminum foil?

A. It would.

Q. And on the price study on aluminum foil you have allowed from the base price a discount of 10% to converters, is that not true, during most of the period of time?

A. As I recall it, that was true.

Q. And that under your price study relative to cellophane there were no converter discounts allowed nor quantity discount provisions allowed?

A. These were the prices to the principal user, the principal customers, who were the user.

Q. I am asking you, Mr. Bricker, were any discounts
7582 taken off?

A. I can't take a converter discount off a product which is sold to a user, Mr. Renninger.

Q. It is also sold to converters; converters get a discount, do they not, when they buy cellophane?

A. The prices on here are the prices to the principal customers, the principal class of customers, which are the users. I can't take a converter discount off a user price.

Q. Yes, but you can take a quantity discount off, can't you?

A. We were informed there were no quantity discounts applicable.

Q. As to .00088 gauge cellulose acetate, did you consult any price lists in computing this price chart?

A. The information was supplied by the Eastman Kodak Company.

Q. But the information that you received from the Eastman Kodak Company, was that actual prices quoted from their own price lists?

A. These are average prices, I believe, by years. We were unable to get the individual prices and the dates of change.

Q. What was the price of .00088 cellulose acetate for the year 1949?

A. 82¢.

7583 Q. Does that price apply for the whole year, or is that the price for the beginning of the year?

A. To the best of my knowledge it is for the whole year; it is the average price for the year 1949

Q. How did you happen to select this gauge, .00088 for cellulose acetate?

A. It is a principal gauge material sold. We had price history on it for two years more than the .0001 gauge.

Q. Do you know, Mr. Bricker, whether there was any cellulose acetate of this gauge sold by the Eastman Kodak Company during the year 1949?

A. I do not know as of my own knowledge. I assume from the fact that they supplied us a price for the year '49 and specifically indicated they did not manufacture in 1950 that they did sell it in '49.

Q. Is it not true that the Eastman Kodak Company in their price list for 1949 and 1950 did not include this .00088 gauge of cellulose acetate film as being manufactured by them?

A. I don't know. All I have before me is the information supplied by them stating that the average price in 1949 was 82¢.

Mr. RENNINGER. If your Honor please, I would like to move to strike this Defendant's Exhibit No. 994 on the basis of the

7584 errors contained therein of one type or another, not allowing for the different price changes that were made by OPA or by the particular company involved, not taking into account the quantity discount provision as to cellophane and many other reasons that have been brought out in this testimony.

Mr. GESELL. I suppose, your Honor, I am going to have a chance at re-direct before these conclusions of the Government become fact. There has been quite a distortion of this on the examination.

The COURT. I will reserve ruling on the motion that was just made.

Mr. GESELL. Thank you, your Honor.

The COURT. We will recess this case until October 31st, Wednesday.

(At this point the trial was adjourned to Wednesday, October 31, 1951, at 10:30 o'clock A.M.)

day, October 31, 1951, at 10:30 o'clock A. M.)

* * * * *

7589 WEDNESDAY, OCTOBER 31, 1951, 10:30 O'CLOCK, A. M.

Present: As before noted.

George W. Bricker (Resumed).

Cross-examination (Cont.) by Mr. RENNINGER.

Q. Mr. Bricker, will you please turn to Defendant's Exhibit 985?

A. Yes.

Q. This is the colored chart which I believe you stated on direct examination to be based on the figures contained in Defendant's Exhibit 984; is that correct?

A. That is correct.

Q. Will you please tell the Court what Defendant's Exhibit 985 means, what it purports to show?

A. 985 is a chart which shows all of the information contained on Exhibit 984 plotted in such a manner that for each of the end use groups the length of the bar, the multi-colored bar for each end use group represents total number of square inches of wraps used for that end use. The bar itself is divided vertically in the colored stripes. Each one of those colored stripes if read vertically is equal to the percentage shown on the second column,
7590 the last column, that is, of 984. They are superimposed on each other running up to 100%.

Q. Mr. Bricker, for example, let us take bakery products under both 984 and 985. What does the figure and the red bar for cellophane cover? What types of cellophane?

A. That covers all types of cellophane and combinations of any other material with cellophane.

Q. Would it cover in the case of a bread wrap a wrapper that is almost entirely of wax paper with an insert of a window of cellophane?

A. It would cover wrappers which are made of two materials, one of which is cellophane.

Q. How would the square inches of such a wrapper be computed into the bakery products in 984 or in the chart 985?

A. They would be figured on the basis of the total area of the wrap.

Q. In other words, even if a wrapper was 90% wax paper, say, you would consider it all as cellophane if it had a cellophane window or a cellophane insert or something of that sort?

A. I know of no wrappers that would be 90% wax paper, but whatever the size window of cellophane was in it, that would classify it in this study under the broad group "cellophane."

Q. For these bakery products in Defendant's Exhibit 984 and 985 within what limits would you consider these stated percentages of the major material groups used to be representative of the entire converting industry?

7591 A. I don't believe I can state an exact percentage that that might vary, but in my opinion it would not vary very much for the entire converting industry, the entire bakery industry.

Q. In Defendant's Exhibit 984 under bakery products I see that the percent of the total end use for cellophane is 6.8%. How much error would you expect to find in such a figure?

Mr. GESELL. I object to that question as being vague and indefinite. Error in what regard? In relation to what?

The COURT. I think the objection is sound. It is sustained.

By Mr. RENNINGER.

Q. In relation to the whole converting industry.

The COURT. I still don't understand the question. Would you read it, Mr. Reporter?

(The last question was read by the Reporter.)

By the COURT.

Q. Can you answer the question?

A. I think I can answer it. I believe that the degree of difference between the 6.8%, which is the figure for these 19 converters, and a similar figure if all converters in the country were included, would be within 5% one way or the other, and by 5% I mean 5% of the 6.8% or less than 1%, less than ½%.

7592 By Mr. RENNINGER.

Q. In other words, if you had used all 23 converters that you had originally planned to use in this study, the 6.8 per cent for cellophane would not change materially; is that what you mean?

A. It would not change materially.

Q. Well, what would you believe this percentage of cellophane to be if you had used another sample of converters in which cellophane, glassine, wax paper, and other converted materials were sampled more representative?

A. I think this is a representative sample.

Q. Did you not state Friday that the converter study had proportionately more cellophane in it than any other packaging material?

A. I said it had proportionately more converted cellophane.

Q. In it than any other packaging material, than any other converted packaging material?

A. I do not remember exactly the words I used. There was more cellophane, a greater proportion of the converted cellophane in here than of the converted other materials. But we must remember that all wax paper is converted.

Q. Well, on Page 4533 of the transcript, did you not say that other materials are probably much lower in percentage,

the study has more cellophane in it, we believe,
7593 than it has of the other materials as to their proportion of the total converted?

A. That is correct, I believe, as to the proportion converted. I again call attention to the fact that wax paper is a converted product.

Q. How many wax paper converters do you have in this study?

A. Seven or eight.

Q. How many of these seven or eight are exclusively wax paper converters?

A. None of them, I don't believe, is exclusively a wax paper converter. That is their principal business. Most of them convert——

Q. That is the principal business of all eight of these converters that convert wax paper?

A. That is what they are known as. That is their principal business.

Q. Did you not state that 16 of the 19 converters in this study converted two-thirds of all converted cellophane?

A. I believe that that is approximately correct.

Q. Don't you then believe that this sample is heavily weighted as to cellophane?

A. It is weighted as to cellophane, so far as conversion is concerned.

7594 Q. Then would that not be an enormously high percentage for cellophane under bakery products in Defendant's Exhibits 984 and 985?

A. I do not believe so, for this reason: If we take the percentage of cellophane in this study to all cellophane, not only that which is converted, but that which is sold direct, we get a percentage which is quite similar to the percentage of all wax paper which is included in the study, and to all glassine which is included in the study.

Q. We do?

A. Yes.

Q. Isn't it, though, really just coincidental that you came up with a figure of 6.8 per cent for cellophane under bakery products?

A. There is nothing coincidental about it. This is the information which was developed from these 19 converters. This is what they sold.

Q. Did you not state on Friday that the converter study was much lower in percentage when it came to wax paper or the other products than cellophane?

A. Of converted cellophane.

Q. Yes, that is a converter study, is it not?

A. That is correct. Not all cellophane is sold to converters. Some of it is sold to users who converted themselves.

Q. We are talking about this converter study here.

7393 And did you not state on Friday that the converter study was much lower in percentage when it came to wax paper and other products than cellophane?

A. I did.

Q. Did you not state that the wax paper study did not include the Pollock Paper Company?

A. I did.

Q. Which you stated to be probably the largest wax paper company in the country?

A. That is correct.

Q. And also one of the largest converters of glassine?

A. That is correct.

Q. Did you not state that the converter study did not include the Riegel Paper Corporation, which in your words converts a large amount of glassine?

A. That is correct.

Q. And did you not state that there are probably 50 large wax paper converters, and that the converter study only covered eight wax paper converters?

A. I did.

Q. And didn't you admit that there are probably also several thousand wax paper converters in the United States?

A. I did not.

Q. How many vegetable parchment converters are there in this price study?

7396 Mr. Gesell. I beg your pardon. You said price study. Are you talking about a price study?

Mr. Rennison. I beg your pardon.

Q. I mean in this Defendant's Exhibit 981, and Defendant's Exhibit 985.

A. I have not checked to see how many of these converters convert such parchment. I would say offhand that five or six of them do, at a minimum.

Q. Do you know?

A. I have not checked.

Q. Is there any way in which you can check?

A. That can be checked, yes.

Q. Did you not state in your proffer of proof that there was only one converter of vegetable parchment included in this study?

A. One who is classed as a manufacturer and converter of that.

Q. I am talking about a converter.

A. Other converters buy vegetable parchment.

Q. How many foil converters are there in this study that only convert aluminum foil?

A. That only convert aluminum foil, did you say?

Q. Yes.

A. Even the Reynolds Metal Company uses some other materials with foil.

7597 Q. As to this particular study, what companies did you include that convert aluminum foil only?

A. The Reynolds Metal Company converts aluminum foil and uses some other materials also.

Q. In laminations?

A. In laminations, yes.

Q. Then to what extent is this sample as expressed under bakery products underweighted as to wax paper or as to glassine?

A. Mr. Renninger, this is a study of 19 representative converters. A check of the amount of wax paper that is included in this study shows that we have about 24 per cent of the total wax paper.

Q. 24 per cent of the total wax paper manufactured in the United States; is that what you mean?

A. Yes. We have about the same percentage, 24 per cent of the glassine; we have about the same percentage of the total cellophane.

7598 Q. Well, if you have underestimated wax paper and glassine how wide a range would it vary?

A. I did not say I underestimated glassine and wax paper.

Q. But you just stated that you left some of the largest wax paper companies out of this study?

A. I stated that this was a sample.

Q. You stated there were many others in the country that are not included in this study?

A. There are many other converters of all types of material that are not included in this study. This is a sample.

Q. Then how representative do you think it to be?

A. I believe it is thoroughly representative.

Q. Even though there are loads of wax paper converters, vegetable parchment converters, and other converters that are not included in this study, and on the other hand you have heavily overweighted it in reference to cellophane by including two-thirds of all converted cellophane; but yet you say it is a representative sample?

A. This is a representative sample of the converting industry; it is a representative sample of the use of cellophane, wax paper, glassine, and all the other products. Much of the cellophane is converted by the user. Much glassine is converted by the user himself. He prints it. He makes bags out of it. But wax paper——

7599 Q. But it is understood——

Mr. Gesell. Let him finish the answer.

The Court. Read the last question.

(The last question and answer were read by the Reporter.)

The Court. Continue.

A. (Continuing.) Wax paper is a product which is waxed by a converter. It does not become wax paper until it passes through a converter. There is no such thing as manufacturing wax paper and selling it direct or by passing the converter, because the converter manufactures it. Therefore all wax paper is a converted product.

By Mr. Renninger:

Q. We are talking here, however, about this particular chart, the converter study; we are not talking about direct sales. I am trying to get from you the margin of error as to converted cellophane. We are not talking about what is sold directly.

A. The only thing I can say about that, Mr. Renninger, as far as the converters are concerned that this states a maximum of cellophane in proportion to the rest.

Q. Is it not heavily overweighted?

The Court. I don't know what that phrase means. I have heard it all morning.

Mr. Renninger. If your Honor please, perhaps I can
7600 explain. In this study the witness has stated, and I think I am correct in this, that this study includes two-thirds of all converted cellophane. Now, as to wax paper there are included only eight companies who to some extent convert wax paper. The witness has admitted that there are probably fifty large wax paper converters, that there are many more other small wax paper converters all over the country; that there is included in this study only one really vegetable parchment paper converter.

Mr. Gesell. He has not testified to that, Mr. Renninger.

Mr. Renninger. No, he has not.

The Court. Here is my difficulty. If you are correct in your present thesis then if the chart should be redrawn in accordance with what you are trying to bring out from the witness it would show that these other materials in the packaging industry have greater volume, as far as the public is concerned, than cellophane, and to that extent if Mr. Gesell's legal theory is right, and these are what Mr. Minicus calls substitute materials, it would be in support of the defense's theory and not in support of weakening the effect of the exhibit. That is why I can't follow what you are trying to bring out.

Mr. Renninger. In the first place, I am trying to attack
7601 the veracity of this particular Exhibit 984 and Exhibit 985.

The Court. By showing that cellophane is a lesser feature in the competitive market with other packaging materials?

Mr. Renninger. That is right, your Honor.

The Court. Go ahead.

Mr. Gesell. That was the attack on the Cretors figures also, your Honor, that we had overstated.

Your Honor has the point.

The Court. I have the point.

Mr. Renninger. That is what we are trying to show your Honor, that this is heavily overweighted as far as cellophane is concerned.

The Court. To that extent Mr. Gesell has been unfair to himself.

Mr. Gesell. We have leaned over backwards, your Honor.

The Court. Yes.

Mr. Renninger. I think the charts are entirely inaccurate.

The Court. Proceed.

By Mr. Renninger.

Q. I believe you stated, Mr. Bricker, on direct examination that you had gone around to all these 19 converters and had stud-
7602 ied their method of carrying on business and their invoices and their general standing in the trade and things of that nature; is that correct?

A. That is correct.

Q. In your study of the converter industry did you find that there has been a shortage of cellophane for a number of years?

A. I found that cellophane had been on allocation in certain years. I found that it was not on allocation in 1949.

Q. It was not on allocation at all in the year 1949?

A. During the greater part of 1949 I am told it was not on allocation.

Q. You know the extent of the allocations of cellophane to the converters?

A. No, I don't.

Q. You don't know what percentage of the converter requirements are filled by the manufacturers of cellophane?

Is it not true, Mr. Bricker——

Mr. Gesell. Wait a minute. There is a question pending.

Mr. Renninger. I thought he answered the question.

Mr. Gesell. No, he did not. If you want to strike the question——

Mr. Renninger. No.

A. I do not. I didn't get into any such question.

7603 By Mr. Renninger:

Q. Is it not true that in the year 1949 the only period where there was not a shortage was during the period from March through August?

A. I don't know the dates.

Q. Do you know what margin of profit a converter receives from the baked goods industry as compared to other industries?

A. I do not.

Q. Do you or do you not know whether the cellophane converters channel their sales of cellophane away from the baking industry during a period of shortage into other industries where the margin of profit is greater?

A. I have no knowledge of how they conducted their business in that respect.

Q. Now, Mr. Bricker, will you please turn to Defendant's Exhibit 986, which I believe is called "Bar Chart," is that the common terminology for it?

A. I think that is probably it.

Q. Here also I believe you stated that Defendant's Exhibit 986 was based on the figures found in Defendant's Exhibit 984; is that correct?

A. That is correct.

Q. What does Defendant's Exhibit 986 mean? What does it purport to show?

A. It purports to show on the left-hand bar the total
7604 amount of all materials used for these various end uses, and on the right-hand bar the total amount of cellophane used for these various end uses, all related to 100% in each case.

Q. Taking Defendant's Exhibit 984 again, under "Bakery Products" is not the figure 1 trillion, 625 billion, 166 million square inches as being the total for all products listed in Defendant's Exhibit 984 represented by the 41% on the left-hand bar?

A. That is correct.

Q. Is not the bar on the left-hand side of Defendant's Exhibit 986 actually approximately five times as high as the bar on the right?

A. Yes, the quantity is stated at the top.

Q. Why did you present this chart in such a manner?

A. To show the relative proportion that these materials—the relative proportion of the end uses for all materials and for cellophane.

Q. Couldn't you have shown it more graphically by having the bar on the left five times higher than the bar on the right?

A. There are various ways of presenting statistical information, Mr. Renninger. This is presented on a percentage basis, and the title says "Relative Importance." We have noted what the total quantity of the material is at the top of each bar.

7605 Q. Well, is not the cellophane category depicted on the righthand bar under bakery products, where you have 14.2

percent, only 6.8 percent of the bakery product part of the bar on the left?

A. In terms of the actual square inches, yes.

Q. In other words, the height of the cellophane part of the chart, the bar on the right, is not actually the same height as the total product part of the chart as depicted by the bar on the left?

A. Again I repeat, Mr. Renninger, this is a percentage bar. This is showing 100 percent how it is divided up, to the different end uses. There is no mystery about it.

Q. How can you properly evaluate the two bars on the basis of equal height for each bar?

A. There is no intention of trying to compare the bars in terms of their relative height. Each bar is to be read individually to show the relative percentage of each of these products. Each of these end uses that was used for that material, whether it was cellophane or all materials. The fact that we have in the center a designation which carries arrows both ways is simply to simplify the reading of it.

Q. Mr. Bricker, will you please turn to Defendant's Exhibit No. 981 at this time under the year 1935——

7606 Mr. GESELL. What page are you on, Mr. Renninger, please?

Mr. RENNINGER. Page 2.

By Mr. RENNINGER:

Q. You have a figure there for sulphite wrapping paper.

A. Yes.

Q. How was that figure determined? That was not a figure that you obtained directly from the census.

A. The figure obtained from the census was a combination of waxing papers, butchers' paper, sulfite bag and wrapping papers. It was split up between those three groups by using the same ratio that each of those three groups bore to the total in the years 1937 and 1939 when the break-down information was available.

Q. Well for this year, then, how did you eliminate butchers and imitation parchment papers from the census figure that you received on this item?

A. I just explained it, Mr. Renninger.

Q. You took, in other words, a proportionate amount, a proportionate figure out of sulfite bag and wrapping paper in 1935 which represents a proportion percentage of grocers and imitation parchment papers?

A. I do not believe that that is the way. I will have to have my working papers.

Q. I wish you would have your working papers on this,
7607 Mr. Bricker. I think this particular phase here is important.

(Thereupon a document was handed to the witness.)

A. I think my answer is the same as I had it before, that we have a figure for 1935 for sulfite wrapping paper which includes butchers and grocers and imitation parchment.

Q. For the year 1935?

A. For the year 1935. The census figures were included in that category.

Q. Will you please check your figures that you obtained from the Bureau of Census for the year 1935 and look under the column for grocers and imitation parchment papers.

A. I do not believe I have the paper I want here.

Mr. RENNINGER. Is it all right if I show him our copy?

Mr. GESELL. Surely.

(Thereupon a document was handed to the witness.)

A. You asked me about which figure?

By Mr. RENNINGER:

Q. For grocers and imitation parchment for the year 1935.

A. It is marked "N. A."

Q. Which is interpreted to mean, in the notes at the bottom of the page——

7608 A. Not available.

Q. Not available.

A. We were informed that that was included with sulphite bag and wrapping papers.

Q. Who informed you that it was so included?

A. Whether that was personal information from the Bureau of Census, or whether it appears in the census publications on some note, I am not sure. I have it noted on my working papers here that in those years it was included in that category.

Q. The information that you received from the Bureau of Census, according to the chart, it says it was not available.

A. Not available would mean that it was not included in some other figure.

Q. In all the other instances where an article is included in another figure, does not the census so state in the figures that you received from them?

A. I am unable to reconcile the reason for that, but I am sure from the basis of my working papers here that we did get that information, that it was included in there.

Q. You do not know where you got that information?

A. Either from the Census directly or from the published reports of the Census.

Q. You do not know who you talked to, or anyone
7609 else, to get this figure?

A. I cannot identify where that particular figure—where that notation comes from.

Q. If butchers' and vegetable parchment papers were not included under sulphite wrapping papers, then your figure for 1935 would be wrong; is that correct?

A. The figure would be higher.

Q. It would be wrong, it would be incorrect?

A. Yes, it would be higher, but I do not believe that the figure was wrong. I do not believe the assumption is correct.

Q. What did Dr. Stevenson say was the average weight of waxing papers under 18 pounds?

The COURT. What was the average what?

Mr. RENNINGER. Weight.

By Mr. RENNINGER:

Q. The average weight for waxing papers under 18 pounds?

A. 15 pounds.

Q. But yet you have included waxing papers over 18 pounds, but excluded them under 18 pounds, even though the basic average is 15 pounds for those under 18 pounds; is that correct?

A. There are two distinct classifications of papers.

7610 Q. Two distinct classifications of papers? They are not used for the same purpose; is that what you are saying?

A. They are not. They are not generally used for the same purpose.

Q. They are not generally used?

A. That is correct.

Q. Mr. Bricker, why have you excluded the production figures that you received from the Dow Chemical Company for Saran films for the years 1943, 1944, and 1945?

A. Those were excluded because they were used for military packaging of metal parts; that would not come under the classification of retail packaging.

Q. You included them for the year 1947, 1948, and 1949, did you not?

A. That is correct. It was used for ordinary commercial packaging.

Q. Wasn't the type M film that you purportedly excluded, included in the production figures for 1947, 1948 and 1949?

A. I am informed it was not, that their entire production of Saran films in those years was type 517.

Q. Who told you, Mr. Bricker?

A. Mr. Minbiole of the Dow Chemical Company.

Q. And in all those years after 1945, Type M film was not included in their total production?

A. That is correct.

7611 Q. Did they or did they not manufacture type M film?

A. We were informed they did not.

Q. Did they or did they not have price lists which listed a type M film?

A. That I do not know.

Q. Under rubber hydrochloride film or pliofilm, which I understand is a trade name of the Goodyear Tire and Rubber Company, how did you determine the yield?

A. Yield was supplied by the Goodyear Company.

Q. Is this yield that you used in your production chart the same yield that you used in the price study?

A. Offhand, I don't remember. There is no reason why it should necessarily be the same. This is the average yield. In the price study, it is the yield for a particular grade.

Q. How did you obtain your production figures for Cry-O-Rap?

A. Those were obtained in personal interviews with Bradley Dewey, the President of Dewey & Almy.

Q. How is Cry-O-Rap wrapper sold?

A. Cry-O-Rap wrapper is sold by Dewey & Almy Chemical Company directly to the user, the packager.

Q. Is it sold in sheet form?

A. It is not. It is sold in converted form, in bags.

7612 Q. Is Dewey & Almy actually offering film for sale?

Mr. GESELL. You mean today, at this moment, Mr. Renninger?

Mr. RENNINGER. At the time in 1949.

A. In 1949 it was not.

By Mr. RENNINGER:

Q. Do they manufacture the material from which the bags are made?

A. They do.

Q. You are sure of that?

A. Yes.

Q. They don't buy Cry-O-Rap from the Dewey Chemical Company?

A. They buy a modified polyvinyldine chloride from which they further process it into Cry-O-Vac, which is the name of the material. Cry-O-Rap is what they sell.

Q. Since they manufacture bags, Mr. Bricker, don't you think they should properly be included in the converter study?

A. Mr. Renninger, the amount of Cry-O-Vac—Cry-O-Rap is so relatively small—they are the only producer of it—that it would

not be seen in the figures that we have in the converted study by end uses.

Q. It is so small? How small is it, Mr. Bricker? You say it is so small, why did you include it at all?

7613 A. This is one of a number of films that are included in the last line, and they are grouped together for the purposes of avoiding disclosure.

Q. You say it was very small, why include such an article that is so very small?

A. It is one of the elements here that is part of this market and is used for the——

Q. It is one of the elements that is part of the market?

A. And is used for packaging, retail packaging.

Q. Pre-packaging of the retail packaging market?

A. That is correct.

Q. Mr. Bricker, will you please turn to Defendant's Exhibit 982, page 2?

A. Yes.

Q. I believe you stated that you used the same square inch factor for Sylvania cellophane as for Du Pont cellophane; is that correct?

A. That is correct.

Q. What square inch factor did you use?

A. The Du Pont figure was based on the actual grades produced. The actual gauges and an average area figure was determined. That average area conversion factor was used for Sylvania.

Q. Why did you use that for Sylvania?

A. We had no better basis to do it.

Q. You did not check with Sylvania at all to find out

7614 whether their average yield was the same?

A. No, we checked with the Du Pont people. In their opinion it would be about the same.

Q. Is it not true that the yield for Sylvania cellophane was different from the yield for Du Pont cellophane, at least during the period from 1941 to 1947?

A. I am not aware whether it was or not.

Q. Mr. Bricker, will you please turn to the third page of the same exhibit, 982, under "Notes," and will you please explain what you mean by Note (b)? Perhaps you had better read it first and then explain it.

A. Note (b) reads "Average basis weight for glassine and greaseproof papers figured at 30# (24 x 36—500) to account for any paper heavier than U. S. production which might have been imported under this classification."

The explanation is simply that we were advised that imported

papers were generally somewhat heavier than the papers made here.

Q. What figure did you use as a basic weight for domestic greaseproof and glassine papers?

A. 25 pound.

Q. On the imported you used the basic weight of 30 pounds?

A. Yes.

Q. How did you find out that there might be paper
7615 heavier than United States production imported?

A. That was within the knowledge of Dr. Stevenson.

Q. Under Note (d) will you please read that note and explain it?

A. Note (d) reads "Includes M. G. and M. F. Sulphite wrapping and 'Other wrapping, n. e. s.' 'Other wrapping, n. e. s.' has been reduced 10% to eliminate non-competitive wrapping papers."

Q. What do you mean by non-competitive wrapping papers?

A. I believe that had to do with very heavy weights of industrial wrapping materials. I cannot remember exactly. That again is something which we were advised by Dr. Stevenson.

Q. And you took the figure 10% and just reduced it 10%?

A. That is correct.

Q. I notice here also you do not include any figures for cellulose acetate on importations. Why is that?

A. Because there is no separate report of it in the Bureau of Census.

Q. Is not cellulose acetate reported separately under Section 31B of the Tariff Act of 1930?

A. I don't have it before me. This is the information that was certified to us by the Foreign Trade Division of the Bureau of Census.

Q. Mr. Bricker, would you please turn to Defendant's Exhibit
994, which is a wholesale price study chart? Looking
7616 under "Aluminum foil" I note that the prices start some
time in 1928. Did you not receive price figures from the Aluminum Company of America prior to that time?

A. I will have to get my working papers to answer that question. I have a figure here for 1926.

Q. Why was that not used in your price study?

A. I can't answer that question without consulting with one of my associates.

Q. But you did have a price for prior to 1928 which you did not use in the price study; is that correct?

A. That is correct. The price is $1.05½.

Q. Isn't that quite a big higher than the prices that you have here for 1928?

A. It is.

Q. Mr. Bricker, I believe you stated that all of these particular grades of the various products which were used in this price study are picked because you consider them to be a representative gauge?

A. The regular standard gauge of material.

Q. Let us take the figure on cellulose acetate, .00088 cellulose acetate, the prices which you obtained from the Eastman Kodak Company. Do you consider this to be a representative item?

A. I do.

7617 Q. Didn't the Eastman Kodak Company go out of production in 1949?

A. They did.

Q. So that the Eastman Kodak Company no longer manufactures this item that you consider a representative item?

A. That is correct. It is manufactured in the trade and it is used today.

Q. But the Eastman Kodak Company, the company you used as a basis of this price chart, no longer manufactures this item?

A. That is correct.

Q. Under pliofilm, Mr. Bricker, what discounts did you allow from the basic price?

A. A converter discount of 5% was allowed beginning July 1, 1948. A quantity discount for single shipments of 3% in July 1949, and that is as far as this chart goes.

Q. Mr. Bricker, why did you allow a converter discount in this instance and not allow a converter discount in reference to, say, Du Pont?

A. As I stated before, the prices charted here are the prices to the principal class of customer.

Q. What is the principal class of customer of the Goodyear Tire & Rubber Company?

A. The converter.

Q. How do you know?

A. As stated by the Goodyear Tire & Rubber Company.

7618 Q. They told you that?

A. Yes, sir.

Q. Which is different from the price study information that you obtained from them originally?

A. No.

Q. Who told you that the principal class of customer of Goodyear Tire & Rubber Company was the converter?

A. This data was prepared by Mr. Ellies.

Q. Did he not state that the other manufacturer or converter is the largest class?

A. It is under the heading on the form "Other Manufacturer or Converter."

Q. But you took that to mean that the converter is the largest class?

A. I will change the statement if you wish me to, to say "Other Manufacturer or Converter."

Q. What I am getting at, Mr. Bricker, how do you know that the converter was the largest purchaser?

A. I have changed my statement to other manufacturer or converter.

Q. Was the discount the same for another manufacturer as it was for a converter?

A. Yes.

Q. You are sure of that?

A. The quantity discount applies to all channels of dis-
7619 tribution providing one order of one delivery for 10,000 pounds or more of full mill rolls.

Q. Does it not say that the 5% discount applies to converters only?

A. I think that would be a fair interpretation of it the way this is written here, yes.

Q. Doesn't it just so state, 5% converter only?

A. Well, there is a difficulty there, as you recognize, Mr. Renninger, that the word "only" appears in the box below. I think it probably belongs with converter. 5% converter only.

Q. What was the price of pliofilm in 1941?

A. The price of 120 N2 pliofilm in 1941 was 72¢ per pound list with a 2% cash discount.

Q. Did the Goodyear Tire & Rubber Company give you such a price for 1941?

A. They did.

Q. Is it not true that on the data furnished you by the Goodyear Tire & Rubber Company that the Goodyear Tire & Rubber Company list no price at all for the period from 1940 to 1946, inclusive?

A. This table is a list of changes in price. There were no changes between 1939 and 1947.

Q. Is it not true that no pliofilm or very little pliofilm was sold during the war years, at least for domestic consumption?

7620 A. That may well be true.

Q. Isn't it true?

A. I don't know.

Q. Were any price lists issued by the Goodyear Tire & Rubber Company during that period?

A. I don't know. I don't have any price lists. I have their statement here.

Q. Why do you think a blank was left in this chart which you received from the Goodyear Tire & Rubber Company which depicts the prices for pliofilm?

A. I assumed there was no change in price.

Q. You did not inquire as to whether no pliofilm was sold during the war years or not?

A. This is a price chart. If any was sold the price would apply.

7621 Q. Are there other types of pliofilm suitable for use as flexible wrapping material?

A. Are other types, did you say?

Q. Yes, are there other types of pliofilm that are suitable for use as a flexible wrapping material?

A. There are. One of them is 120-P-4.

Q. How does 120-P-4 compare with 120-N-2 that you used on your price study, as far as prices are concerned?

A. It is a higher-priced item.

Q. Why did you use 120-N-2?

A. That is a standard gauge of material used for this purpose.

Q. Is this type 120-N-2 suitable for, say, wrapping cigarettes?

A. I do not profess to know what the exact uses for which pliofilm can be put are, all its uses.

Q. But you say 120-N-2 is the principal types of pliofilm sold?

A. A principal standard grade.

Q. A principal standard?

A. Yes.

Q. Under polyethylene, Mr. Bricker, were any discounts allowed from the base price?

A. The discount applicable to one-time purchasers of 10,000 pounds or more have been deducted from the prices

7622 as given.

Q. And that is because the discount would apply to the largest class of customers to which this product is sold; is that correct?

A. It is not a discount. It is a difference in price on a quantity bracket. It is a 10,000-pound quantity bracket is what the price really is.

Q. But this was to the largest class of customer?

A. Well, the largest class, I presume, would buy in the largest bracket, but they might not be the only ones. They buy in the largest bracket.

Q. You have stated in the past that the discounts or various deductions taken from the base price are based upon the fact that that particular price or discount was allowed to the largest group of customers; is that the case here?

A. Yes.

Q. Mr. Bricker, what relationship does Defendant's Exhibit 994, that is, the wholesale price chart, bear to the price exhibits, 979, 981, and following? That is, the converter study?

A. 995?

Q. 994? I beg your pardon, the wholesale price study. What relationship does this wholesale price study have to the rest of the charts and graphs prepared by you?

7623 A. This chart was prepared from entirely different information.

Q. It has no relationship, then, with the converter study?

A. This is a chart of prices of materials sold by manufacturers.

Q. But it doesn't tie in in any way with the converter study——

A. The two studies were made independently.

Q. ——which is designated by Defendant's Exhibit 984 to 988, inclusive?

A. The two studies were made independently.

Q. So under 994, in computing these prices, in some cases you took the converter prices, in other you did not; in others you did not; is that not so?

Mr. Gerth: You have two questions there.

Mr. Bernstein: I will divide them up, Mr. Gerth.

Mr. Gerth: I wish you would.

By Mr. Bernstein:

Q. So that in computing the prices in Defendant's Exhibit 994, in some cases you took a converter price, in others you did not, is that not correct?

A. The price is to the principal class of customer.

7624 Q. I am asking for an answer to the question, Mr. Bricker, please.

A. Some of those principal classes of customers were converters, some were all customers, some were jobbers, and converters, and some were users.

Q. In some instances you took into account a quantity discount, and in others you did not; is that correct?

A. In all cases the maximum or usual bracket of purchase is used. These are transaction prices. So-called quantity discounts are matters of the individual transaction, the quantity purchased on the transaction.

Q. If it depends on the individual transaction, I think a proper picture would be, then, to eliminate any discount provisions?

A. Why?

Q. I am asking you, would it not?

Mr. Gerth: No, wait a minute, now. You are starting to testify.

The Court: Wait a minute. We are getting confused here. Let us start it over again. Put a question to the witness.

By Mr. Rennison:

Q. Mr. Bricker, I believe you testified that these prices depend on individual transactions; is that right?

A. Yes.

7625 Q. Individual transactions to the highest purchaser or highest individual, as far as purchases are concerned, the highest class of individuals?

A. Principal customer.

Q. Since these vary, the prices that you have quoted here, some are the prices given to a converter, some are those given to a wholesaler, some of those were given to a direct user. To obtain a proper perspective, price perspective, would it not have been better to either compute the prices all on one basis, on the same basis, whether you would—whether it would mean not computing or taking your discounts in one case and not in the other, or whether it would mean eliminating any questions of discounts at all?

Mr. Sivertz: Objection.

The Court: What are the grounds?

Mr. Sivertz: On the ground that it is a completely unintelligible question. It is full of suppositious postulates that the witness can't follow, and the answer will be meaningless.

The Court: I do think the question should be condensed simply on account of its length and also on account of its complexity. See if you can't break that down to about six questions.

Mr. Rennison: Yes, sir.

By Mr. Rennison:

7626 Q. Is it not true that in this price study in some instances you have used a converter discount, and in other instances a quantity discount, and in other instances a price quoted directly to the consumer?

A. The overall answer is yes, but you have got several kinds of discounts in there. If the principal class of customer is the converter, we have the functional converter discount, if there is one.

Q. Since you have several different types of discounts involved here, would it not have been more accurate, or would it not present a more accurate picture, by either eliminating the discussion of any discounts at all, or using the same discount all through your price study, the same type of discount all through your price study?

A. We have tried to follow the general method of the Bureau of Labor Statistics in quoting prices which are to the principal customer of the manufacturer. In some cases that principal class of customer is a converter. In other cases it is not. That is the basis on which the study was projected.

As far as quantity discounts, so-called, are concerned, some manufacturers quote various prices depending on the bracket of shipment. Others quote a flat price with a discount, depending on the bracket of one shipment. Sometimes that is expressed in cents per pound; sometimes it is expressed in percentages.

7627 We have used here the maximum or usual bracket of shipment in all cases.

Q. Why would you use a method used by the Bureau of Labor Statistics when here you are trying, I presume, to show the price to a converter?

A. It does not purport to show the price to a converter. It shows a price to the principal class of customers. This chart is for the purpose of showing the general trend of prices of these specific grades of materials to the principal class of customer sold by these people.

Q. On the price chart is bleached glassine. What discount, if any, did you allow from 1924 to November 1926?

A. That price, as I testified before, was taken from O'Anew Mitchell.

Q. What discount, I am asking you, did you allow?

A. I allowed no discount.

Q. You allowed no discount?

A. I took a price which they said was an average price.

Q. Yes. And what did you do with it?

A. Nothing. I used it that way.

Q. Will you please refer to your work papers again, Mr. Bricker, under bleached glassine, and see if you did not allow a two per cent discount for payment within 30 days?

A. Yes, I allowed a cash discount.

Q. What is the basis for this deduction?

7628 A. That was the practice in the industry.

Q. Back in 1924?

A. I believe we were informed of that.

Q. Who told you that?

A. Probably the Rieger Paper Company.

Q. Probably. Do you know?

A. I can't recall specifically. That would be my inclination, to believe that.

Q. So, in other words, you took a price which you obtained from a price history contained in an O'A regulation, which just gave various average prices for various years, and from that you arbitrarily deducted a 2 per cent discount; is that right?

A. A 2 per cent discount was deducted.

Q. Was the same apply for bleached glassine?

A. You mean greaseproof?

Q. I beg your pardon, I mean bleached greaseproof?

A. Yes—no, by answer is no, because that price was not plotted back in those years you are speaking of, if I remember the dates you mentioned.

Q. Mr. Bricker, I will amend my question to cover the early years of your price study under bleached greaseproof from 1933 to 1946.

A. Yes.

7629 Q. Why didn't you carry the bleached greaseproof study back as far as you did the glassine?

A. It was projected back six years from 1939 to 1933 on the basis of a statement in MPR 167, to the effect that the greaseproof prices closely paralleled the glassine prices. We did not continue it back in 1933 because we recognized that the figure prior to that was a long-range figure, and we did not extend the greaseproof one on that same basis.

Q. Then why did you put the glassine in for the earlier years from 1933 to 1939?

A. To indicate the level at which it had been.

Q. How did you determine what discount to allow on vegetable parchment?

A. There is an allowance of a cash discount which was supplied by the Patterson Parchment Paper Company.

Q. Did this discount apply to all purchasers?

A. This was a cash discount.

Q. Do you have any indication as to what class of customer accounted for the largest sales?

A. The price applies to all customers.

Q. But you do not know what class of customer represented the largest sales?

A. That was marked confidential and not provided to us.

7630 Q. Under Defendant's Exhibit No. 994 again, Mr. Bricker, what do you mean by the term "leading manufacturers"?

A. I mean a principal manufacturer, a leader in the trade.

Q. A principal manufacturer?

A. Yes.

Q. Not necessarily the largest?

A. Not the leader, necessarily.

Q. Will you please now turn, Mr. Bricker, to Defendant's Exhibit 1060?

A. I have it.

Q. This is entitled "Wholesale Prices of Selected Flexible Packaging Materials, 1949 Average Price," is that not correct Mr. Bricker?

A. That is correct.

7631 Q. Now let us just take plain waxing sulphite 25 pounds, coated, opaque, the first one on this table. Will you please tell the Court how the average 1949 wholesale price was determined?

A. The price of that material changed seven times during the year. The total number of days on which each one of those prices applied was averaged in. In other words, taking the particular price for ten days, another price for twenty-one days, another price for fourteen days, and so forth, through the year, and multiplying the price days, if you will, and adding that together and dividing by 365.

Q. By this method do you consider that you have properly established a weighted average price for this product?

A. I do.

Q. How significant is the average price that you have used or how good do you think such an average is?

Mr. Orsell. I object to that. Good for what?

The Court. Objection sustained.

By Mr. Rossiter:

Q. How significant is the average price that you have used?

Mr. Orsell. Significant for what, your Honor?

The Court. Objection sustained.

By Mr. Rossiter:

Q. Is this the accepted statistical method for computing

7632 an average price?

A. It is.

Q. It is?

A. It is.

Q. Is this the way the weighted average price of a product is determined by the various manufacturers in the industry?

A. In computing their own average price at which they sell they would compute it on the pounds sold. In computing price index it would be computed on the number of days the prices were in effect.

Q. Oh, this is a price index? Is it not possible——

Mr. Orsell. Is that a question?

By Mr. Rossiter:

Q. It is a price index?

A. It is an average price computed the way a price index would be computed.

Q. An average price computed the way a price index would be computed?

A. Yes.

Q. Is it not possible under this method that a large tonnage would be sold during a relatively short time when one price was in effect and a small tonnage sold over a long period of time when another price was in effect?

A. That is correct?

7633 Q. In such a case this price would not be necessarily accurate; is that not true?

A. This would not necessarily represent the average price received by the manufacturer for the entire year.

Q. Let us take cellulose acetate .00088 gauge that you have used here. What company's figures did you use as the basis of your price figures for cellulose acetate?

A. That is based on Eastman Kodak Company and is the price in effect the first business day of the year. That particular one is not an average for the entire year.

Q. That is only for the first day of the year?

A. That is correct.

The COURT. Let us take our recess now.

(At this point a brief recess was taken.)

By Mr. RENNINGER.

Q. Mr. Bricker, I believe before the morning recess you stated as to cellulose acetate .00088 gauge the average price used here is only the price as of the first of the year; is that correct?

A. That is correct.

Q. Why wasn't an average price for the whole year used?

A. Because we did not have price history from Eastman Kodak for the entire year.

Q. Is it not true that Eastman Kodak Company stopped
7634 the manufacture of .00088 gauge cellulose acetate film early in 1949?

A. No, I understand that it was after the middle of the year.

Q. After the middle of the year?

A. Yes.

Q. But they did stop the manufacture of this .00088 gauge cellulose acetate some time during the year 1949?

A. They did. The price of 82¢ was in effect all the time they were manufacturing it so it is an average for the period of manufacture.

Q. Mr. Bricker, do you know whether the price list for February 1, 1949, listed cellulose acetate .00088 gauge, the price list of the Eastman Kodak Company?

A. I do not. I have not seen the price list itself. The information came to us from the form which we supplied to them.

Q. But you did not check to find out whether this gauge of cellulose acetate was included in the price list of the Eastman Kodak Company for February 1, 1949?

A. No, I did not check with their printed price list; it was checked with people there.

Q. Under aluminum foil, Mr. Bricker, in the same exhibit, Defendant's Exhibit 995, this, I believe, you stated provides for a discount to converters; is that correct?

7635 A. It does.

Q. But the price list for plain cellophane and moistureproof cellophane does not contain a discount to converters nor a quantity discount?

A. It is the transaction price to the largest class of customers.

Q. I am asking you does it or does it not contain or was the discount to converters or a discount, a quantity discount, taken off the base price for moistureproof cellophane and plain cellophane?

A. No converter discount was taken off. The price is for the maximum bracket on an individual sale.

Q. Was any quantity discount taken off?

A. No quantity discount.

Q. How is .00035 gauge aluminum foil used?

A. Did you say how is it used?

Q. Yes.

A. It is used for packaging.

Q. By itself?

A. It is.

Q. In what instance?

A. It is used to package chocolate bars.

Q. Uncoated?

A. Uncoated.

Q. Without a laminating or an embossing?

7636 A. Yes.

Q. Can .00035 gauge aluminum foil be heat-sealed?

A. Not without a coating.

Q. Is there any other use for .00035 aluminum foil plain uncoated besides candy bars?

A. Offhand I can't state specifically another use.

7636A Q. Does not also the candy bar also have an outer wrap of sulphite paper or other type of paper?

Mr. GESELL. What candy bar, your Honor?

Mr. MINICUS. What the witness is talking about.

Mr. GESELL. I object to the question. It is not definite.

The COURT. Objection sustained.

By Mr. RENNINGER.

Q. What candy bar do you mean can be used with .00035 gauge aluminum foil, plain, uncoated?

A. Any type of chocolate candy bar, solid chocolate, was what I had in mind; chocolate kisses are wrapped in it.

Q. A solid candy bar, isn't that not also overwrapped with some other paper?

A. It has an identification band around it, very often, and sometimes it is completely overwrapped.

Q. Now, let us look at Defendant's Exhibit No. 995. What are the fibrous materials that you have listed here?

A. By fibrous you mean wood pulp products?

Q. No. Isn't plain waxing sulphite considered a fibrous product?

A. All paper products are fibrous products.

Q. All paper products are fibrous products. Is cellophane a fibrous product?

7637 A. Technically, I do not know that I can answer the question. It is made of wood pulp.

Q. Is it not considered a film?

A. It is called a film.

Q. Well, then, going to the paper-products, what are the paper products you have listed here?

A. Plain waxing sulphite, 25-pound coated opaque; plain wax sulphite, 30-pound, self-sealing; bleached glassine, 25-pound; bleached greaseproof, 25-pound; vegetable parchment, 27-pound.

Q. What are the prices quoted for these products?

Mr. GESELL. I object to that. Quoted to whom and when, what customer?

Mr. RENNINGER. Quoted on this chart.

Mr. GESELL. The chart speaks for itself right there.

The WITNESS. You want me to read the price per thousand square inches, or the price per pound?

By Mr. RENNINGER.

Q. The price per pound.

A. Plain waxing sulphite, 11.9 cents; plain wax sulphite, 15.2 cents; bleached glassine, 17.8 cents.

The COURT. Now, wait a minute. What is the purpose of that?

Mr. MINICUS. This is quite a significant point we are getting at now, your Honor.

7638 The COURT. Why should he read them to me? I can look at them. Get to the question with respect to the significance of the figure, if it has any, but do not have a witness read a column of figures to me.

By Mr. RENNINGER.

Q. Are these prices lower or higher than the prices given for cellophane?

A. They are lower.

Q. Are they much lower?

A. I would call it much, yes.

Q. Let us take the so-called films, cellulose acetate, pliofilm, polyethylene, Saran, and Cry-O-Rap, are these prices for these products higher or lower than the prices that you have listed here for cellophane?

A. The price per pound is higher.

Q. What about a price per thousand square inches?

A. The price per thousand square inches in the case of all except aluminum foil—I do not remember if you included that in your question.

Q. No, I did not.

A. The price of all of these other materials is higher.

Q. Aren't they quite a bit higher?

A. The prices shown on this schedule are higher, the raw material prices.

7639 Q. Now, is aluminum foil an opaque material?

A. It is.

The COURT. Tell me, Mr. Witness, on DX-986, which has to do with all materials and cellophane, I understand that everything on that except one, and that is dry bevgrages. What are dry beverages?

The WITNESS. Coffee, tea.

The COURT. You mean like a tea bag?

The WITNESS. Yes, a coffee pouch.

By Mr. RENNINGER.

Q. Are any of the products listed on this chart within the exact price range of DuPont cellophane?

Mr. GESELL. I object to the question.

The COURT. Objection sustained. The question is of no help to me, because I do not understand it for this reason: To what is it directed?

Mr. RENNINGER. If your Honor please, we are trying to show here that all the papers listed here are very much lower in price than DuPont cellophane, and all the films listed here are all very much higher than DuPont cellophane.

The COURT. I can accept that by simply reading this DX-995.

Mr. RENNINGER. All right, sir, I withdraw the question.

By Mr. RENNINGER.

7640 Q. Mr. Bricker, why did you select the particular year of 1949 for your converter study, and this Defendant's Exhibit 995, the 1949 average price study, why did you pick the year 1949?

A. When we started to work on this we were working on the year 1950. We were getting information up through the year 1949, and the cut-off was 1949. That explains the price chart; the converter study, as I stated previously, when we went out to

the converters, that was the most recent information. It was probably the only information we would have been able to get out of their files easily.

Q. Did you or did you not in selecting this year consider the question of shortages of cellophane?

A. 1949 was the year that was obvious to make the converter study. It was the most recent year.

The information was available. We knew at the same time—I knew that cellophane had been off allocation during that year.

Q. How long had it been off allocation?

A. I did not know the exact length of time. My impression was that it had been off during most of the year.

Q. You do not know?

A. I base that on knowledge that I had in working with another company back in 1949 when it went off allocation.

7641 Q. Was it on allocation in January of 1949?

A. My recollection is that it went off in February. That is not from my knowledge in this case, but that is from my own personal knowledge prior to that.

Q. But you know there was a shortage during part of this time, at least?

A. I can't say that I know there was a shortage, because I know that there was plenty of stock on hand in some places.

Q. Well, if there had been a shortage, is it not true that such a shortage would have a direct bearing on your converter study and all these other charts that you have prepared?

A. It might have, if there were a shortage.

Q. Would it not have a bearing? Would it change these figures?

A. I can't state. All I can state is that this is what was sold in the year 1949. If some other conditions had existed in the year 1949, everything would have been somewhat different. To what extent, I do not know.

Mr. RENNINGER. If your Honor, please, we have finished our cross examination——

Mr. MINICUS. I would like to follow this last thought through for a moment.

7642 The COURT. Do you want to confer with your associate?

Mr. MINICUS. I would like to ask a couple of questions.

Mr. GESELL. Don't we have an understanding that only one may cross examine a witness, and that we do not have relays?

Mr. MINICUS. There are no relays.

Mr. GESELL. This man has been under cross examination for a full Court day, and now you are going to subject him to examination——

Mr. MINICUS. I would like to examine him for a very limited purpose, just on these last three or four questions.

Mr. GESELL. I object, I think it is improper, your Honor, to subject any witness to different examiners. I thought that was the understanding in this case, and it is proper court procedure, if the Court please.

Mr. MINICUS. I would like to confer, then, for a moment, your Honor?

The COURT. Yes, you can confer with your associate, and let him finish the examination.

Mr. MINICUS. Certainly, sir.

By Mr. RENNINGER.

Q. Mr. Bricker, I believe that you stated from your personal knowledge you knew that one company went off allocation in February of 1949; is that correct?

7643 A. That is my recollection.

Q. What company was that, Mr. Bricker?

A. That was Union Bag and Paper Company.

Q. Do you know of any other companies that went off allocation at this time?

A. I do not. I have no knowledge of any other company's operations at that specific time.

Q. Do you know whether any companies went off allocation in February or March or April?

A. I do not know what the dates of actually going off allocation are. All I can say is that I know——

Q. You know that one company went off allocation?

A. One company had stock and was going off allocation.

Q. Had stock? I want to get that clear.

Had stock, or went off allocation?

A. Both.

7644 Q. But as to the other 19 companies in this converter study you don't know whether they were on allocation or off allocation or whether there was a shortage of cellophane as to those other companies or not?

A. I do not.

By the COURT.

Q. Who fixes the allocation?

A. That I don't know.

By Mr. RENNINGER.

Q. Do you know when that one company that you testified about went back on allocation?

A. No, I do not.

Mr. RENNINGER. If your Honor please, as I stated before, we have finished our cross-examination of this witness. We have a

number of objections to various of these Defendant's Exhibits that have been authenticated by the witness. Should I present them to you at this time or would it be more convenient to wait until after re-direct?

The COURT. I think it would be more appropriate to have Mr. Gesell finish his re-direct and then I have the witness' testimony complete. Then I will hear you on your objections.

Mr. RENNINGER. All right, sir.

7645 Redirect examination by Mr. GESELL:

Q. Mr. Bricker, at page 4506 of the transcript you were asked about a letter from the Aluminum Company of America giving its production for foil. Is this a copy of the letter?

A. It is.

Mr. GESELL. I offer it in evidence and ask it be marked Exhibit 997.

(The letter from the Aluminum Company of America to Robert Heller & Associates dated November 10, 1950, was received in evidence and marked, "Defendant's Exhibit No. 997.").

By Mr. GESELL.

Q. Mr. Bricker, at page——

The COURT. Just a moment. Should that be marked 997?

Mr. GESELL. It follows the sequence of these exhibits, your Honor, that are in these written schedules.

The COURT. I see.

Mr. GESELL. You see, they bear the last numbers. It just follows along.

By Mr. GESELL.

Q. At page 4547 of the transcript, Mr. Bricker, Mr. Renninger made the suggestion that those scatter charts might contain a situation where a particular material used by a particular con-

7646 verter accounted for 99% of his production. Is there any such case?

A. There is not.

Q. What is the largest percentage which you find on analysis of the scatter charts that a single item of material represents against the total?

A. A single x represented 56% in one case. That was the largest case.

Q. And that was chocolate or chocolate coated candy?

A. That is correct.

Q. Will you read the largest percentages for the other items on the scatter chart?

A. Variety bread, 19%; cookies and wafers, 27%; for fresh sausage, 51%; for ham, pork, shoulder butts, and slab bacon, 31%;

for powdered drink mixes, 24% ; dried fruits, 31% ; cheese, 22% ; fresh vegetables, 23% ; and potato chips, 40% .

Q. You were asked also about the Union Bag Company, with particular reference to the conversion of kraft paper. How many converters in this study convert kraft?

A. About two-thirds of them.

Q. Can you give us some indication of the importance of plain kraft paper against the total of this study?

A. Plain kraft used as such represented about 2% of the total area in this study.

Q. Directing your attention, Mr. Bricker, to 994, have you at my request drawn on that chart certain additional data?

7647 A. I have.

Q. Now, we had an hour or so of examination on Friday concerning your failure to take into account OPA M. P. R. 567, amendment No. 3, of August 2, 1946. Have you reflected the adjustment in the schedule which would be brought about by that amendment?

A. I have.

Q. Will you state to the Court where that is reflected on 994?

A. That will be found in red ink on the lines 25 pound bleached glassine and 25 pounds bleached greaseproof in the year 1946 extending for about four months.

Q. It is the red mark there at the bottom of the page over 1946; is that right?

A. That is correct.

Q. Now, Mr. Bricker, the record in this case discloses that prior to January 1, 1947, the maximum discount cumulative or otherwise paid by Du Pont on cellophane was 10% to any class of customers; that the discount on January 1, 1947, became 7½% for converters until 8/1/48 and no quantity discounts were paid after January 1, 1947; and that from 8/1/48 on the discount was 5%. Have you at my request reflected on Defendant's Exhibit 994 those maximum discounts without regard to class of trade against both types of cellophane on the assumption they existed over the entire period:

7648 A. I have.

Q. And are those the green lines?

A. They are.

Q. In any case on Defendant's Exhibit 994 other than the green lines is there any reflection of cumulative quantity discounts?

A. There is not.

Q. I show you a schedule which I will ask to have marked Defendant's Exhibit 994B and I ask you if that states the company whose material is used, the type of material, the class of purchaser, and the quantity bracket reported in the study?

A. It does.

Mr. GESELL. I offer it in evidence.

(The schedule referred to was received in evidence and marked, "Defendant's Exhibit No. 994B.")

Mr. GESELL. I have no further questions, your Honor, for the witness.

Re-cross-examination by Mr. RENNINGER:

Q. Mr. Bricker, will you please turn to Defendant's Exhibit 984, the last page of that exhibit?

A. Yes.

Q. The title of this breakdown, I believe, is "No End
7649 Use Known."

A. That is correct.

Q. I think a note referring to that breakdown says that no end use known is principally stock bags; is that correct?

A. That is correct.

Q. What were those stock bags principally represented by?

A. They are principally glassine and cellophane.

Q. It would not be kraft bags?

A. There are no kraft bags, common grocery bag, no kraft stock bags in there.

Q. Mr. Bricker, would you please turn to the new exhibit, Defendant's Exhibit 994, where the corrections have been made for cellophane?

A. Yes.

Q. Does this exhibit not also show that all the papers are lower in price than cellophane?

A. It does.

Q. And as to the films, with the exception of cellulose acetate sheeting of the .00088 gauge, all these films are much higher in price than cellophane?

A. They are higher in price.

Mr. RENNINGER. That is all, your Honor.

Mr. GESELL. No further questions.

The COURT. You are excused, Mr. Bricker.

7650 Mr. GESELL. There is one point with respect to Mr. Bricker's testimony. He has noted a few inaccuracies in the transcript which were unavoidable with all the figures, and he has handed them to me. I can read them into the record at this point, your Honor. There are about six in number.

The COURT. Why don't you just hand them to the Reporter and he will copy them into the record.

Mr. GESELL. The following corrections in the transcript were brought to my attention by Mr. Bricker after he had read it, and they are made at his suggestion to put the transcript in accord with his recollection of what he said.

(The corrections referred to were made physically in the record by the Reporter.)

Mr. GESELL. So that the record is clear at this point, your Honor, we wish to withdraw the offer of 994 in the form originally presented and to offer it in the form discussed by the witness on redirect examination, which is identical to the original offer with the additional data in red and green which he discussed.

Mr. MINICUS. As what number, your Honor?

Mr. GESELL. No. 994.

Mr. MINICUS. Thank you.

(The substitution referred to was made.)

Mr. RENNINGER. If your Honor please, taking these exhibits as a whole, we of course have our general objections
7651 to them on the basis of immateriality, irrelevancy, and incompetency, which we have expressed to you before. As to these exhibits relating to the year 1949 we also have our objection on the basis of date; that is, these exhibits are post litem motam evidence and we object to them on that ground.

The COURT. As I have already ruled on the two situations to which you have made reference, for the purposes of the record I overrule your objections on that score.

Mr. RENNINGER. Yes.

We have very specific objections to various of the defendant's exhibits concerning which Mr. Bricker testified. As to Defendant's Exhibit 981——

Mr. GESELL. That means there is no objection to 979 or 980?

Mr. RENNINGER. There is no objection to Defendant's Exhibit 979 or 980.

In the first place, your Honor, we feel that the title of this Exhibit 981 is wrong, and it does not adequately portray what is represented in this exhibit. It is not the "Position of Du Pont Cellophane in United States Market of Selected Flexible Packaging Materials," but according to Mr. Bricker's testimony as found on pages 4456 and 4447 and elsewhere this exhibit consists of "a group of flexible packaging materials which are used for pre-packaging of retail packages." Neither the Bureau of Census nor any trade association recognizes such a market.

7652 Also Mr. Bricker stated on direct, transcript page 4431, that, "a purpose of the work was to assemble statistics regarding the markets in which cellophane was sold." Hence we do not have here a flexible packaging materials market and the selection of products used was biased.

Mr. Bricker also stated that he felt that this was a representative table which he would recommend to a business firm. I wish to point out to your Honor that what constitutes material that can

be used by a business firm is entirely different from what is proper evidence in a court of law.

Also we object to this exhibit on the grounds that the table did not include a waxing paper under 18 pounds, fruit and vegetable tissue, butcher's paper, grocer's paper, imitation parchment paper, and sulphate paper, although most of them are found to some extent in the converter study. As to fruit and vegetable tissue Mr. Bricker stated on page 4455 of the transcript that "fruit and vegetable tissue is one of many tissues which were not included in the study because it did not seem to add to the picture."

Defendant's Exhibit 981 states that the figures are based on official U. S. Department of Commerce Bureau of Census publication and tabulations as to the papers listed in this exhibit. However, only 17 of the 39 figures relating to papers are actual figures obtained from Census. The remaining 22 figures were estimates.

7653 As to the aluminum foil production figures listed in this table, production for the year 1925 to 1928, inclusive, was entirely a guess estimate. No company figures were used even as a basis for determining any production. Aluminum production for the years 1940 to 1944, inclusive, was based on ALCOA's production figures, and although production figures were available from ALCOA from 1940 to 1940, these figures were not used as a basis for an estimate for the years 1945 to 1949, but an adjusted 1947 figure from Census was used for 1947, together with the 1950 figure from the Aluminum Association, and the other years 1945, 1946, 1948 and 1949 just being an estimate based on these two figures.

7654 As to the films, Dow production of Saran was given to Heller for the years 1943 to 1946. However, this production figure was not used by Heller for 1943 to 1946, and in 1946, only a part of Dow's production was used.

Mr. GESELL. The witness testified that he used the part that was available for flexible packaging material, and he told you that again today. I am sure you do not mean to misrepresent.

Mr. RENNINGER. I do not mean to misrepresent, but he said the other type of film is also a flexible packaging material that is used, I believe principally as an industrial. But it is still a flexible packaging material.

As to rubber hydrochloride film or pliofilm, which is a trademark of Goodyear, the figures used were estimated, estimates obtained from duPont salesmen's trade reports, as discussed previously ——

Mr. GESELL. There is no proof of that in the record. He said they were obtained from the duPont Trade Analysis Section.

You tried to put the words "Trade Reports" into his mouth, but he did not so testify.

Mr. RENNINGER. Which, in turn, was obtained from the Analysis Section——

Mr. GESELL. There is no evidence of that in the record, your Honor.

7655 Mr. RENNINGER. The production years for polyethylene were also estimates.

As to our objections to Defendant's Exhibit 982, we have the same objections as to Defendant's Exhibit 981, as Defendant's Exhibit 982 is simply a conversion of tonnage figures to thousand square inches.

We also have the following additional objections: The average basic weight of 30 pounds is used as a conversion factor for glassine and greaseproof papers, whereas Heller in its price chart used a 25 pound basic weight figure.

Mr. GESELL. Your Honor, what do we do about these inaccuracies?

Mr. Renninger, I am sure, isn't attempting to be inaccurate, but there are some things that aren't in accord with my understanding of the record.

The COURT. You are going to have an opportunity to answer him, and if you want to point out his inaccuracies at that time, you may do so.

Mr. GESELL. Very well, your Honor. You would prefer that I did not interrupt now?

The COURT. I would prefer that you did not interrupt.

Mr. RENNINGER. If I point out any inaccuracies——

7656 The COURT. Mr. Gesell will have an opportunity to agree with you or disagree with you.

If you agree with him, that is the end of the matter. If you disagree with him, I do not want to hear any more argument.

We will go to lunch now. We will recess until 2:15.

(At this point a recess was taken until 2:15 o'clock, p. m., of the same day.)

2:15 O'CLOCK, P. M., THE SAME DAY.

Present: As before noted.

The COURT. Proceed, Mr. Renninger.

Mr. RENNINGER. If your Honor please, at the conclusion of the morning session I was pointing out the Government's objections to Defendant's Exhibit 982, which contain the same objections just discussed as to Defendant's Exhibit 981, as 982 is simply a conversion of the tonnage figures to thousand square inches, and I had pointed out several additional objections that we had to this exhibit.

Note D on Page——

7657 The Court. This is DX——

Mr. Renninger. 982.

The Court. That's right.

Mr. Renninger. Note D on Page 3 of Defendant's Exhibit 982 shows that Heller has arbitrarily taken a 10 per cent reduction to eliminate non-competitive wrapping papers, whatever that means. There is no cellulose acetate import figures given on the table. The pliofilm average yield used in computing the square inch basis is different from the average used on the price charts, and the same with aluminum foil.

In Defendant's Exhibit 982, the average yield for aluminum foil was considered as 20,000, and in the price study the figure of 29,200 was used as a basis. This is quite a difference. It implies that either one or the other is a wrong basis to be used.

The Government objects to Defendant's Exhibit No. 983, also, your Honor. The total assets given in this exhibit are the total assets of the entire company, and not that portion of the assets relating to the flexible packaging materials manufactured by each of the companies.

The 1949 sales for each company embraces the total sales of each particular company; and is not limited to the sales of the particular flexible packaging material manufactured by each company described therein.

7658 In addition, there is no basis of comparison between the total assets or total sales between the companies listed therein, and the total assets and sales of E. I. duPont de Nemours and Company or its subsidiaries.

Your Honor may remember that the Defendant has already objected to our introduction into evidence of a duPont financial operating record of duPont and its subsidiaries on the grounds that the defense counsel could not see the relevancy of the company's operation as a whole.

Mr. Gesell stated in discussing this problem on Page 2403 of the transcript, and I quote, "This is a cellophane case, I thought, and here he is bringing in the operations of the entire company."

Mr. Gesell. Now, I object to that, your Honor, unless he reads what I said. I was talking about a rate of return on investment. Is that not correct, Mr. Renninger, and I was talking about the comparison between the rate of return on investment of all the different products and cellophane, and I was not talking about the point you were presenting to the Court at all.

Mr. Renninger. The discussion went on further, your Honor, and your Honor may remember that you said you could not see the relevancy between cellophane and paints and lacquers, or something to that effect.

7659 The Government objects to Defendant's 984, 985, 986, 987, and 988. These documents are all inter-related and are generally considered as the converter study. Our objections to these exhibits will be discussed together. If one exhibit is not a proper exhibit then none of the exhibits should be admitted into evidence.

In the first place, your Honor, we feel that the selection of the 19 converters used in this study are not representative of all converters in the flexible packaging industry. The only test of reliability as to the converter study is a categorical statement by Mr. Bricker found on page 4531 of the transcript in which he states, "The reliability of it is that we are convinced we have a good sample, a very substantial sample of the converting industry."

As to Defendant's Exhibit 987, the Government objects to the computations of laminations. As you will remember, it was brought out that when cellophane was combined with another material for lamination purposes the total square inches of the entire product was considered as cellophane in certain instances, as foil in certain other instances——

Mr. GESELL. No. No, Mr. Renninger. Please let us keep that straight. Everything laminated with cellophane was treated as cellophane.

Mr. RENNINGER. Everything laminated with cellophane was treated as cellophane.

7660 Mr. GESELL. And that shows on the very exhibit.

Mr. RENNINGER. But when an article was laminated to foil it was all treated as foil.

Mr. GESELL. Unless it were cellophane.

Mr. RENNINGER. Unless it were cellophane, and the same way on down through the list. When you have a lamination of two products it is our contention that you wind up with an entirely separate product, not just cellophane or foil or paper, but an entirely different article, a laminated article which should have been so designated.

Defendant's Exhibit 986 is particularly objectionable also in that it not only contains all the misrepresentations discussed above, but the two bar charts therein depicted are of equal height and size. In reality the bar chart on the left which relates to all materials used in the converter study should be approximately five times higher than the bar chart used on the right which is supposed to depict a conversion of cellophane only.

The COURT. Maybe Mr. Gesell did not have a long enough piece of paper.

Mr. RENNINGER. Well, he could have cut down the size of the bar.

Defendant's Exhibit 988, the so-called X chart or scatter charts represent material sold for various end use by con-
7661 verters. Each X is supposed to represent a sale by one of the 19 converters of the particular type of so-called flexible packaging material or various combinations thereof. Mr. Bricker stated in one instance that for one X of one company represented approximately 50% of all the material sold, and there were various other high percentages represented by other one Xs in the other of the charts. There is no indication here as to who the converters are who would be important in a proper evaluation of such a chart. It might be possible for a converter to convert principally one type of material only and from this chart we would not know the importance of any particular X. Also these ten X or scatter charts are hand picked by Heller from quite a large number of end use code classifications. As an example, Mr. Bricker admitted that the white bread classification contained a much higher tonnage than variety bread, while only variety bread was used in a scatter chart.

Defendant's Exhibit 994 as amended——

The COURT. What about 990, 991, 992, and 993?

Mr. RENNINGER. The Government is not objecting to the introduction into evidence of those charts, your Honor.

The COURT. We are up to Defendant's Exhibit 994.

Mr. RENNINGER. As amended.

The COURT. As amended.

Mr. RENNINGER. If your Honor please, even though the cellophan price listed for Du Pont does now allow for the converter discount and the discount to direct purchasers, we have
7662 various other objections. In this chart for 25 pound bleached glassine the chart shows the exact same price from 1924 to 1933, the only basis for this price being a statement in an OPA regulation which stated that during the depression of 1920–1921 the average price fell to $16 per hundred weight and in 1933 reached a low of 9.75.

7663 The price of bleached glassine as depicted in the chart showed a rise in November, 1933, which remained constant until 1939. The only basis for such a price was a statement in the same OPA regulation that from the end of 1933 to 1939 the price of bleached glassine fluctuated around $11 per hundred weight, and various other average prices are given for the period before the OPA price of November 25, 1944.

The amended exhibit does take into account Amendment No. 3 of the OPA MPR–567 of August 2, 1946. However, the Government contends that there is still no basis for allowing a 2 per cent discount off of the bleached glassine and greaseproof papers where

the source for which the price was obtained, the OPA regulation, does not provide, or does not so state that a discount was allowed by the manufacturers.

As to the 25-pound bleached greaseproof, according to the chart, that is, Defendant's Exhibit 994 amended, the study starts in January 1933. Now, the basis for this price is the same OPA price history as for bleached glassine. Now, if bleached glassine prices started in 1924, the same should also apply for bleached greaseproof. I don't know how you can use a figure in one instance that goes back to 1924 and in another instance just start in 1933.

And here again we have the same average prices
7664 listed for bleached greaseproof as for glassine when the price actually fluctuated considerably.

As to 00035 gauge aluminum foil, it is the Government's contention that not a representative gauge of foil was used. The type used is one of the thinnest gauges. It is not heat sealable without an extra coating. It is not a laminated foil, which in almost all instances is necessary before it can be used as a flexible wrapping material. And this type of foil is subject to easy tearing and having pinholes. Also as to aluminum foil, there was no price given on the chart for 1926, although Mr. Bricker stated that they had the price figures for 1926 from Alcoa.

The Government objects to Defendant's Exhibit 995, the 1949 average price chart. This average price given in this exhibit is not a weighted average price. It is only an average based on the number of days that such a price was in existence. Hence, it is possible for a large tonnage to be sold during a short period of time when one price was in effect, and a small tonnage sold over a long period of time when another price was in effect.

This is not the way that the average manufacturer computes
their average weighted price. And here these prices vary,
7665 some of the prices quoted are those to the consumer, some to the user, some to the converters, some of them take into consideration quantity discounts, and others do not.

And as to cellulose acetate 00088 gauge, the only price we have for cellulose acetate, and it is not an average price, is the price for the Eastman Kodak Company as of January 1st, 1949, and Mr. Bricker even admitted that this item was entirely dropped from the production schedules of the Eastman Kodak Company during that year.

Those are our objections, your Honor.

Mr. GESELL. Well, your Honor, these objections seem to me, looking at them generally, to go to questions of weight and not admissibility. There is quite a distortion of what I think the record shows on some of these points, and to that extent I would like briefly to comment on one or two of the exhibits.

First as to Exhibit 981 and 982, the witness stated that as of 1947, which is a date of some significance in this case, the amount of estimating against those census certified figures was one-tenth of one per cent, and for the entire schedule every estimate amounted to only five per cent of the schedule.

Now, all of the bases of those estimates have been fully
7666 explored, and most of the Government's contention seems to be that cellophane's percentage should have been lower. We do not have any objection to that. If waxing papers and tissues and other things had been included, it would have been lower. We are not here required, and we do not propose at any stage of this case, to define the precise limitations of the flexible packaging market. We need only show that within that market there are a number of materials with which we compete, and which are used so much for like purposes, and alike in property, and other things we have been talking about, that the monopoly power does not exist. And there is no obligation on us to do more than that, and that is all that schedule purports to show, that if you take the most comparable group for which figures are available, the percentage is minimal. And as far as the square inch figures are concerned, the basis for each of those was fully discussed.

We think the converter study is shown to have been representative. They know exactly who the converters are on these schedules, and the end uses; they have all the underlying detail on that. And to the extent it helps their case, or they thought it would, they used them.

As far as the prices are concerned, I think we have gone out of our way to meet the Government's position by showing cellophane at a disadvantage to the other listed materials by showing cumulative quantity discounts as to cellophane and not showing
7667 them as to any of the other items on the chart.

I think that it is clear that this work was done carefully and conscientiously, and using the available data. And the Court has to recognize in connection with this the difficulty in a situation of this kind of entering into competitors' business and obtaining precise figures from them on matters of competitive consequence, which we weren't able to do.

The Court. I am ready to rule on Plaintiff's objections to the following documentary evidence: As to DX-981-89, DX-994 and DX-995, the objections to the Defendant's Exhibits go, it seems to me, to the credibility and weight of this particular evidence. The cross examination was virtually a caveat against that evidence, but I do not think Plaintiff's arguments are persuasive against the admissibility of the documents. Therefore, the objections by the Plaintiff to the admissibility of the writings are overruled.

(The papers referred to as Defendant's Exhibits 981–89, and Defendant's Exhibit 994 and 995 were received in evidence.)

Offers in evidence

Mr. GESELL. Before we leave this market phase of the documents, your Honor, I would like to hand up a copy of Professor Albert Wesley Frey's book, "Manufacturers' Product, Package, and Price Policies," which we referred to some time back in the evidence.

7668 Mr. MINICUS. Is that going in evidence, your Honor?

Mr. GESELL. You took judicial notice of the book, your Honor.

The COURT. Do you want to look it over?

Mr. MINICUS. Not at all. I just want to know what its status is, in case we want to refer to it at a later date.

The COURT. I think I will take judicial notice of it, the same as any other text.

Mr. MINICUS. Very well, your Honor.

The COURT. Do you want me to keep this?

Mr. GESELL. Yes, that is a copy for the Court.

I might say, your Honor, that Judge Wyzanski and other judges in this area of the judicial decisions relied on that book in connection with problems that have arisen.

7669 We are now, your Honor, at the beginning of Volume 3 of these seven volumes of documentary materials and your Honor will note that the first sub-section which we reach in that volume is a section entitled "Du Pont's Cellophane Prices."

The COURT. Yes, sir.

Mr. GESELL. That covers a group of exhibits from Exhibit 335 to 385.

The COURT. Yes.

Mr. GESELL. Our trial brief discloses the issues as we see them under the fourth contention which is the general statement of our position that embraces price on page 4, but more specifically under Paragraph 21 at page 10 and Paragraph 32 at page 13 of the trial brief.

I wish to offer in evidence at this time the group of exhibits 335 to 385, inclusive, and I will discuss them as a group.

Mr. MINICUS. The Government has only one objection to those exhibits, your Honor, and if you care to hear it now I think it might save a discussion of that exhibit. That is with regard to Defendant's Exhibit 358. This is an exhibit in the form of a graph purporting to show the price history of cellophane from 1924 through 1935. As your Honor will note, it shows a very dynamic period in the history of these prices, but stops quite abruptly

at the 1935 period. If your Honor will have recourse to the
7670 exhibit that was just admitted, to-wit Defendant's Exhibit 994 as amended, it will be noted there that after this 1935 period the price history of Du Pont was considerably different than is portrayed in this very narrow exhibit here.

Our second objection is addressed to the manner in which the prices are set forth in the graph. Your Honor will note that certain large black dots indicate a price change, and as between those dots there is a descending line. So that if one attempted to ascertain in 1925, shall we say, the difference in the price in the middle of the year, it would look from this graph as though it were lower than $1.75. Again recourse to Exhibit 994 as amended will show that what actually happened there was that a table line or a straight line went right across and then there was a sharp drop on January 1, 1926. So on those two bases the Government must object to the introduction into evidence of this graph.

Mr. GESELL. Well, your Honor, perhaps I should not have offered it, because it is identical with the Government's own exhibit which they offered in their case, Government Exhibit 188 at page 526, and I have put it in here for purposes of enabling me to summarize at this point the price trend. The identical exhibit was offered by Mr. Minicus and is in evidence.

The COURT. Objection overruled.

Mr. MINICUS. Your Honor, if I may answer Mr. Gesell,
7671 I think that that is not in——

The COURT. I am not ruling on that basis, Mr. Minicus. I am ruling on this basis: That what you had to say about 994 is simply a comparison or it is by way of argument showing that it is a truer picture of the actual fact of price reduction than perhaps Defendant's Exhibit 358, but I see no harm in having 358 in.

Mr. GESELL. It appears at page 526, your Honor, of their case.

Mr. MINICUS. It happens to be a little picture taken from the front of a price list, and I believe in putting in the price list that also happened to be on the front of the price list. That is what this is from, I believe, your Honor.

Mr. GESELL. That is right, and you offered it.

Mr. MINICUS. We offered the price list.

The COURT. Regardless of that, I am admitting Defendant's Exhibit 358.

(Defendant's Exhibits 335 to 385, inclusive, were received in evidence.)

Mr. GESELL. Thank you, your Honor.

I don't intend to go back over the wealth of material that there is on this price subject in the Government's case, but I do want to emphasize that there is an enormous amount of material already in

evidence supporting the basic contention of the defendant
7672 here, and that is that the underlying intent with respect to the price reductions apart, of course, from the natural existing intent to make money, was an intent to lower the price so that cellophane could open up new markets and participate in new markets where other materials were performing the packaging function, and the issue as we see it as to price is the issue of intent.

We have a large number of documents already in evidence on that, not only the documents talking about price as a detriment to sales, but specific documents starting early in 1926 where Mr. Yerkes, for example, in Government's Exhibit 1483 is stating that the purpose of the price reduction was open to new uses in wrapping lower-priced goods and statements of Mr. Hatt several years later in GX–347 where he states "the reasons for consideration of proposed price revision at the present time are largely the attempts to open up new and larger markets on possible units of lower-priced commodities and also the present and prospective competitive situation not only as regards to other manufacturers of a material similar to cellophane, but also including the recent improvements in glassine."

A statement in GX–483: "Price reduction of November 30, 1928, in numerous instances caused consideration of cellophane to be reopened on a basis of lower cost."

I quote from GX–435 in 1930: "Lower prices and the rapid progress being made in the mechanization of wrapping
7673 methods which has progressively opened up new markets, particularly in industries and for many purposes where formerly prices and hand wrapping methods inhibited its use." There are many others of the same kind.

We are going to discuss several specific ones here, your Honor, not each of them. I want to direct attention first of all to the chart that appears as the first exhibit, 335, at page 641, and there I have attempted to present in capsule form, as it were, what this price situation was in relation to the other market developments of significance that are shown there, and I think this chart summarizes a wealth of words and discussion that we have had in the case to date and is a convenient point of departure. You will see in the jagged line the chart of the cellophane price that is the average annual price per pound of Du Pont cellophane, and you see that charted with the curve coming down and leveling off as we get into the war period and slightly rising thereafter, and against that in the solid line is the volume measured on the right-hand column of sales volumes in millions of pounds, and you see the specific correlation between the substantially upward thrust of the volume against the substantially downward thrust of the

prices, and you see in that way an over-all measure of the effect of price reduction in enabling Du Pont to enter into markets where its price previously had been prohibitive.

7674 Now, we have charted two other things across the top. We have charted in the rectangular squares there the patent period so that you can by drawing vertical columns relate the lowered prices and the rise of volume to what took place in the period of product patent protection on the core of this business, Du Pont's moistureproof cellophane, a patented product; and you will see that practically the entire development took place against this background of patent coverage; and we have also charted at the very top the tariff situation so that you can see at a glance what the tariff picture was at any given point. You can see that for the great bulk of the period the substantial 45% ad valorem duty applied; that without getting into any detail as to particular amounts and particular prices shows what happened. Strong product patent protection, substantial tariffs, and then the patentee exploiting his patented product by a continual reduction of price bringing about greater and greater uses of his product and increasing volume and increasing profits for himself.

Exhibit 336 merely charts the actual figures of average selling price which appear in the chart.

Now we have in 337, your Honor, a very significant document. It is a memorandum that somebody made at the time of remarks which Mr. Yerkes made at a Board Meeting of the Du Pont Cellophane Company on December 11, 1924. The significance of that date is obvious. Here you see the beginning of the price reduction policy and you see almost verbatim, as it were, the

7675 arguments that Mr. Yerkes, the boss of the project, was making in support of price reductions at the early moment of this venture, and we mark this in our minds as a key exhibit in the case on this fundamental issue of intent as to price policy. We are particularly directing our attention to the first page which outlines Mr. Yerkes' position, page 643. They start off by saying, your Honor—he does in his report, that sales were by far the worst for many months in a long while, December 1924, and he talks about the difficulty that they are having establishing the product. You get some idea of the early period when he says that the packing machine is not finished yet, goods are not even being mechanically wrapped. Costs are very high. The plant is running at reduced capacity. Stocks have gone up, meaning stocks of unused material.

There is the picture. You can't sell the product and costs are way up, sales are dropping off, and then look what he says:

"I am in favor of lowering the price. I think we are taking a chance on whether we are going to increase volume sufficient to

make up the difference, but my feeling is that a substantial reduction in price should be made. Think it will undoubtedly increase sales and widen distribution. Inclined to think it will increase distribution in candy trade. The Whitman Company is now putting up about 40% of their packages in cellophane.

7676 I really do believe that a reduction of say 25% would widen distribution and increase sales to present customers. Our price I think is too high based purely on manufacturing cost, and too high in comparison with other wrapping papers on the market, and while we cannot approach the price of glassine or other oil papers, if we make a substantial reduction we will in some cases get somewhere near them. Our price is substantially higher than the French price, and there is a certain amount drifting in all the time. Can buy over there and get it in here at somewhere around 7½ after paying the duty. Our average price is about 10¢. We cannot base reduction in price on anything except judgment, cannot show anything in black and white as to what would happen. I do know the resistance we have is entirely one of price. In three-fourths of that the difference is so great that we will probably never overcome it."

7677 Now, there is a practical businessman talking to his Board of Directors as to the considerations which he thinks should underlie the policy of the company entering into this new venture. And I mark this as an extraordinarily significant document, if we are going to try to judge what was the intent of the men who were concerned with the price policy of cellophane.

Now, there are other documents here which I wish to refer to, your Honor. The first is another early document in 1926, 339, which appears at Page 649. This is one of these cases, your Honor, where I was, perhaps, a little over energetic when the Government's case was coming in, because this is the part of the document, their GX-1483, as appears at 509 to 511 of the transcript, which they didn't put in. They put in the last bit of it, the part that I think appears on the last page, and the rest they didn't put in.

But when you look at the specific problem industry by industry in 1926, and I am talking now, your Honor, price, this is price we are talking about, you see what the problem was.

The last paragraph under "Candy, "— "— each price reduction we make opens up new opportunities in wrapping lower priced goods and small units."

7678 On baked goods, the second paragraph on 647, "Due to the lack of water proofness, cellophane has had a setback in the cake industry, although with certain types of cakes it is working sufficiently well to warrant continuing, but not in large

volume, due to the necessity of restricting the territory to which it can be shipped."

And then down below, the difficulty they are having over in meat, there are two paragraphs relating to prices at the top of Page 648, "The big obstacle in selling these concerns is the price of cellophane. They have such a staple line with all sorts of small competition that they have to watch the price of the article for the consumer very closely.

"The lower price of corn may ease the price of strip bacon, which will help us, provided there is not produced too large a percentage of fatty bacon."

Over in drugs, your Honor, the last sentence of the second paragraph on 649, "— the cost of cellophane makes it practically prohibitive there," speaking of the large bulk of preparations of leading drug houses, the cost of cellophane makes it prohibitive.

Over in soap, the first paragraph, again price is the obstacle.

Over in tobacco, the last paragraph on 651, "In the volume cigarette field, price is still the main obstacle."

7679 So we see that here again is concrete proof that DuPont was lowering prices with the intent of opening up new markets and competing more effectively, and that that purpose and that intent is a proper one, it's a legitimate one, and that the results are desirable results.

We have then, your Honor, a whole group of documents pertaining to specific price reduction. We have attempted here to document the announcements to the trade with respect to each of the price reductions, other than those where there was a document in the Government's case to the trade as to why the reduction had been made. And I am not going to read each of them, they all sing the same theme, going out to the trade as soon as the price reduction occurs, and holding it out as a means of opening up new business and getting new volume. And these run along right up to the very last price reduction and state the factor as it was operating in each instance.

We have occasionally extracts from reports of the president to the Board of Directors in which he reports his hopes of getting more volume by reducing price, the problem of meeting competition, and the other facts that I have been discussing.

7680 Now, we have two or three of these which are of this character.

I ask your Honor to look at 367 at Page 685, and I mark this as another of the very significant documents in the price section.

This is a document dated November 27, 1940, and it is signed by Mr. Hatt, and dictated by him, and your Honor will recognize that he was one of the active men in the sales part of this work, and his

name appears frequently through the documents, particularly as to matters of price. Mr. Hatt is dead.

The question is what did he think; why was he reducing prices? What was his philosophy about price reduction?

And here is a letter 11 or 12 years ago where he writes to Mr. Steele, and you will see from the opening paragraph that Mr. Steele was in the advertising and promotional part of the work. He has gotten the proof from somebody who has written an article and says that price reductions tend to discourage competition, particularly where the manufacturer cuts below costs, and it says, "doubtless it has that effect with cellulose film, which is confined to few producers."

And Mr. Steele, the advertising man, sends this proof from some outsider—we don't know who he was—and he says to Mr.
7681 Hatt, "What do you think about that statement?"

And Mr. Hatt hits the air, hits the roof, I should say, and sets out here in this letter beginning at the bottom of Page 685 and continuing over through the middle of the next page, what his philosophy has been with respect to price reduction, why they have been doing it, what the underlying factors were, and why he thinks this fellow who has written this article is off the beam.

He starts out and talks about the patent position and the new product, and then the investment and the need of getting greater volume. They are seeking greater production, higher unit production and lower cost.

I do not believe there is any necessity, your Honor, of my reading any of the other documents in this group, or calling particular attention to them. We have here by this process, I believe, documented every price change in terms of the announcements made to the trade and the underlying factors that operated; with the exception of those that were covered on the Government's case. And I think they all should be read and measured against the background of Mr. Yerkes' initial statement as to what the policy of price reduction was.

Mr. MINICUS. It will be observed, your Honor, that this
7682 section, according to the Defendant's outline, is really broken down into two divisions. The first heading, in general, contained five exhibits, to-wit, Defendant's Exhibits 335 through 339. The first two comprise the table and the draft, the table and chart, setting forth the price decline.

I would like to draw your Honor's attention to Defendant's Exhibit 336, the table at Page 642, and with regard to this exhibit point out that the prices here are stated to be average annual selling prices, and remind your Honor that these average annual selling prices—and for the rest of this case when average annual

selling prices are spoken of, they are not the published price or the quoted price of anything. Average annual selling prices as used here are derived by taking the total sales value for the year and dividing into that the number of pounds sold. Consequently, if more pounds of a more expensive classification of cellophane are sold in a particular year, why, then, your average annual selling price rises, regardless of what the quoted price was.

For example, if your Honor will note there, 1936 and 1937, the price for 1937 is 2/10 of a percent a pound higher than for 1936, the preceding year. Likewise for 1938, it goes up another 1/10 of a percent. And then in 1940 and 1941 and 1942 and 1943 and 1944, there are successive rises in the price of this annual selling price.

7683 Now, all I want to point out in that regard is that in all of these years the price of cellophane, as Mr. Gesell has said, was being reduced. But this annual average selling price was rising. Therefore, I say we cannot take the average annual selling price as a standard for any means of comparison.

For example, if we are comparing Sylvania's price with duPont's price, the average annual selling price gives us a very faulty measure, because it may be in that year that duPont sold more M. T. proportionately than Sylvania sold, and Sylvania, conversely, sold more P. T. So that the average annual selling prices would be higher, or it may be that one of the other companies sold more of a heavier gauge or a more expensive type, and consequently, the average annual selling price goes up.

Now, with reference to 335, the chart there, if I understood Mr. Gesell, your Honor, he stated that the decline in the price line and the ascention of the volume line showed a correlation, the correlation being that as prices were reduced, the volume rose quite dramatically.

Now, I invite your Honor's attention to about the year 1935 on that chart, just about at the point where the two factors in this graph cross. It is quite apparent there from that point of juncture, proceeding to the left, as years go on, there is very little

7684 change in price. In fact, my eye indicates that at the end of the line it is higher than at the beginning, which is marked by the point of juncture.

So by and large there was no price reduction during that period, of a degree, anyway. There were price reductions, but no average decline in the average annual selling price. But yet your Honor will notice again that some of the greatest increases in volume took place during that period. Note the rise from 1946 to date, when, if anything, the price of cellophane was rising.

So I say that on the strength of that, there is very little correlation, if any, between the reduction of the price and this drastically

up-sweeping price—or drastically reduced price with the up-sweep in volume.

Now, as Mr. Gesell stated, the final three documents in this section of five under the heading of general are in support of their claimed policy, which they state was initiated at a very early stage, of lowering the price to permit the wider use of the product. I think our examination is best directed toward a bit of research into that thesis. Was that the case or wasn't it?

It may be that the Government will come out at the end of its argument that that was the case to a limited degree. Now, let's look at that, and in doing so, move along to the second
7685 group of documents in this heading, to-wit, those from Defendant's Exhibits 340 to Defendant's Exhibit 385, and as Mr. Gesell says, the main body of this group comprises announcements of price changes.

It is apparent from looking at them that initially there were about 21 changes in prices that all constituted reductions, and then subsequent to that, some time around 1947, the price commenced to rise again.

This is the basic thing in our entire presentation of this segment of the case, that is, the Government does not deny that duPont changed its prices, and in so doing lowered them very considerably. That was in evidence as far back as our case in chief.

I believe, however, that the issue we are now at for the purpose of this litigation is narrowed to the nature of the motivation leading to these price changes, and the policy considerations which were weighed in their execution.

In other words, why were the prices changed, and what did the company take into consideration when it was considering whether or not to make a price change, and what did it say about these price changes after they were made?

Many determinations entered into the consistent reductions by the Defendant of its price schedule, and some of these were for very valid business reasons. We do not deny that. Mr. Gesell has pointed out some of them. They changed their price.
7686 They considered many things, and some of the things they considered were quite normal for any company when they are changing their price.

However, like the proverbial apple in a basket of bad fruit, the entire system can be tainted by a single wrongful purpose in those considerations when that motive, that wrongful motive, is effected.

Therefore, the Government does not urge that the Defendant's anti-competitive propensities were the sole considerations entering into the policies and practices for the pricing of cellophane,

but it objects strenuously to the defense pointing up only the valid motivations, as though they existed alone in a rarified atmosphere into which no taint ever entered.

Now, in order to balance this picture that has been portrayed on one side, it is only necessary to refer back to the Government's documentary evidence. Therein is delineated in unambiguous terms duPont's intent to and achievement in maintaining its monopolistic position by means of price manipulation.

There is also detailed in this picture some of the component parts of the defense's power to set the price for cellophane not only at an arbitrary point in the price schedule, but at specific times, chronologically, appropriate to its desire to control the current market.

7687 In other words, we say in this proof of price changes, not only do we find a wrongful purpose existing among some valid purposes, but also clear and convincing proof that duPont could set the price wherever it wanted to, and it could set it whenever it wanted to to suit its anti-competitive purposes.

In support of that, your Honor, I would like to make reference to a few documents rather briefly. Mr. Gesell very well brought out that the price, the original price for cellophane was quite high, $2.65 a pound. Now, we start from that base. What was the cost? We will have reference again to Government's Exhibit 392, and there at Page 13 we see laid out all the costs that go into the manufacture of this new product. And they say that the cost has been estimated very carefully. And then on the next page, Page 14 of the report, we see a listing of the costs, and sure enough every cost is in there right down to the contingency fund, the taxes are in there, the depreciation is in there, the administrative costs, the selling costs, all the costs conceivable are in this figure. And we find a figure of $1.13 a pound. The price is $2.65. That is more than a 100 per cent mark-up.

Certainly the price had to be reduced from that figure. It couldn't carry on at that rate. So there we have set our focal point, this original price, the exorbitant price of $2.65 against its cost.

7688 At this point, your Honor, I would like to digress for just a moment, because in this document there are some matters that I asked to be read the other day when it was referred to by the Defendant that I couldn't get read, and I think that in all fairness to the document, inasmuch as certain parts were read, that the Defendant felt helpful to them, the rest of it should be indicated at this time.

Therefore, with reference to the effective competition that might be achieved by these materials, which not I call substitutes, but

that the DuPont Company calls substitutes, I would like to draw your Honor's attention to Page 9 of the report where it is stated that "it has been suggested that very thin sheets of cast cellulose acetate could be used for the same purpose as cellophane, but while such film might in general be just as good or even superior to cellophane, as far as moisture-proofing quality is concerned, it would seem that the cost of the cellulose acetate film would be considerably higher, probably 25 to 50 per cent higher, so that no serious competition is believed to be probable as a result.

"Undoubtedly glassine paper is so inferior that it belongs in an entirely different class and has hardly to be considered as a competitor of cellophane."

Skipping a few lines there which refer to gelatin, which is no longer in the market at all as far as sheets are concerned, we
7689 see that "tin foil is superior to cellophane in that it is more moisture-proof, so that the tin foil packages should keep the contents in better shape as far as moisture is concerned than cellophane, which has been found to be not particularly efficient in this regard. However, as a matter of fact, tin foil is never free from pin holes."

Now, returning to the instant subject matter, we left this in 1924 with the original price of $2.65. The first price change, according to the Defendant's documents, and I believe it to be, is announced in a document of February 2, 1925. That is almost two years after the Defendant had commenced its business operations in this country. And we find in close conjunction with that announcement a document of January 14, 1925, just about 15 days previous. This is a report from Mr. Yerkes to the Board of Directors of the DuPont Cellophane Company.

Now, in that document Mr. Yerkes says, "Speaking of this price change, this first price change, we are not reducing the small orders as much as the large ones. For instance, during the month of December we had over 205 accounts which averaged about $40. This end of the business we believe not to be attractive."

Now, we submit, your Honor, that there is the same Mr. Yerkes speaking, and here is the initiation of the policy that we
7690 went into so much on our case in chief, this favoring of the large customers, the important trade, price-wise, to the disregard of the small account, which we submit ultimately resulted in those flagrant violations of the Robinson-Patman Act.

7691 Then coming to the second price change announced on January 1, 1926, I, too, would like to have reference to the document that Mr. Gesell discussed, Defendant's Exhibit 339, and I would refer to the final page of this report which says under the heading of "Price," : "Each reduction brings us new op-

portunities and customers and a more friendly attitude on the part of our present customers.

"There are one or more concerns bootlegging Cellophane from the Continent and are disturbing the market, doing a volume, as near as we can estimate, of between ten and fifteen thousand pounds per month."

That is a reference to the importers who were then existing in 1926, the only other source of cellophane in this country at that time.

Moving along to the fourth price change, that which occurred on August 15, 1927, here we find one of those letters from Mr. Yerkes to Mr. Bernheim dated July 26, 1927, less than two months before the effective date of the price change, and there speaking of the price reductions this same Mr. Yerkes who was quoted to us by the defense counsel says:

"We decided, and incidentally came to this decision before we knew of the refusal to have the duty increased, to reduce our cellophane price probably on September 1st. It is not definitely settled what this reduction will amount to, but we believe we shall
7692 reduce it about 12%, making our price in quantity 6¢ per thousand square inches instead of 6¾¢, which is the present price. We do not believe this will keep out all foreign cellophane, but we do believe it will have a deterring effect on importations. We leave it to you to decide whether to use this information or not."

That was addressed to Mr. Bernheim of La Cellophane Corporation.

Now, the sixth price change, this price change became effective November 30, 1928. On November 13, 1928, Mr. Hatt to the Executive Committee:

"We shall shortly pass the peak of sales volume for the current calendar year. It seems advisable to further stimulate sales as we enter the new year to more closely approximate our maximum production, and to do so it is deemed advisable to revise our prices downward as of November 30th."

Here we have a slightly different situation. Mr. Hatt is saying "we have some excess production now. Let us stir up the market a little bit. Let us drop the price. That will increase the demand. That will bring them coming in and we will use up this excess production." In other words, a clear cut case of stimulating sales through price reduction, but only after productive facilities have been sufficiently increased to take care of this increased demand. Your Honor, I don't know of very many businesses that can operate in that very wonderful manner.
7693 Here we are in 1928, one producer in the country. We have seen on the plaintiff's case that the importers are

under extreme pressure at this time, and here is the only manufacturer and he can drop the price to stimulate this ever-existing demand on the outside whenever he desires. Now, does he drop it because of market conditions, because a competitor is acting up in the market? Does he drop it because costs are cut? No. We have a little excess production; let us stimulate the market and bring it in.

Then with reference to this same price change No. 6 on December 19, 1928, Mr. F. W. Pickard of the Du Pont Company writes to Mr. Yerkes from Europe under the heading "Cellophane Prices":

"I advised our friends of our reduction in the price of cellophane effective November 30th which pleased them, as they still maintain that the danger of competition from the building of other plants in America is chiefly due to our maintaining prices at too high a level."

Now, this came from Europe, and Mr. Pickard was relaying certain information that he had heard from the French associates over there, and it is merely pointed out at this time that these people are thinking about the danger of some European company coming into this country and building a plant or anybody, for that matter, building a plant in this country that would go into competition with the Du Pont Company, and they observe the greatest danger to be that of the high price.

7694 Again with regard to this same price reduction, Government's Exhibit 4491, which is a bulletin from Mr. Benz to all salesmen:

"In meeting our latest scale of prices, the importers have evidently reduced their margin to such a point that they have to forego entirely some of their former favorite price cutting methods such as 'High Class Seconds', Free Delivery, Full Case Price on smaller lots, etc., in many instances. With these concessions removed, the value of doing business with the competitor has, in many cases, been eliminated, with the result that a substantial number of accounts have been regained during the past sixty days."

We also see the impact upon these importers from this price reduction. They were the only other sources of supply.

Again with regard to the same price reduction, November 14, 1928, from the Cellophane Department to the Executive Committee:

"Accordingly it has been deemed advisable to include in the next price change the following special paragraph to salesmen only for use in connection with our agreement accounts."

They were the accounts, your Honor will recall, that signed up under this discount plan that was discussed in the plaintiff's case.

"To agreement accounts only operating more than one plant and placing orders at one time in excess of a case lot of
7695 one kind of cellophane in one cut size for shipment at one time to more than one plant the case lot price plus ¼¢ per thousand square inches will apply provided no single shipment is less than 2 million square inches."

Now, here is a secret lower price to be given to this important trade.

Let us look at the seventh price reduction, August 1, 1929. From now on I am going to respectfully request your Honor to consider the dates. Something new is being given birth to in this industry. It is 1929. Sylvania is starting to come along now.

The COURT. What defendant's exhibit are you referring to?

Mr. MINICUS. 346, your Honor.

Now, with regard to that price reduction that was made August 1, 1929, on July 9, 1929, just a month earlier, Mr. Yerkes wrote to Mr. Bernheim as follows:

"As a matter of fact, as we understand the situation, the prices used by Sidac are cheaper than that used by Wolfe & Company, and as long as we are going to have competition over here from Sidac the Wolfe competition should not make the situation much more serious. We are anticipating putting in another price reduction some time soon and feel that on account of our large production we are in a pretty strong position. You have prob-
7696 ably noted from some of the recent Board reports that we are building at Old Hickory a new plant of eight machines, exactly doubling the present Buffalo production. We feel that our large output will give us a cheaper cost than our competitors can obtain for several years and we hope that by consistently lowering our prices we can keep them from expanding too much."

Now, the eighth price change: This price change was effective February 1, 1930. On January 4, 1930, Mr. Yerkes wrote to Mr. W. S. Carpenter, Jr.: "We are still making a percentage of profit which is abnormal and which is bound to encourage competition. We have recently heard that the Skenandoah Company were considering manufacturing an article similar to cellophane in connection with Wolfe & Company of Germany. I believe the deal has fallen through either temporarily or permanently, but it indicates that perhaps other viscose-rayon manufacturers may look toward cellophane as a further outlet."

Now, here there is a recognition of the fact that the profit margin is abnormally high on cellophane. This is 1930, seven years after the $2.65 price. In connection with this price change made on February 1st there is recognition of the fact that this element of competition is in the air.

Then on December 31, 1929, in a report from the Cellophane Department to the Executive Committee it is stated:

"In this connection it should be pointed out that the
7697 net return for the year to date in 1929 will undoubtedly exceed 45% of the gross receipts. This figure to be compared with the net of 42.4% in 1928 and 38.8% in 1927 of the gross receipts. Also attention is called to the fact that the net return in 1928 was 51.3¢ per pound on all sales, in 1929 in excess of 48¢ per pound, notwithstanding the November 30, 1928, price cut and the August 1, 1929, price cut, the former of which exercised practically no effect on the return in 1928, but amounted to a full reduction in price on all the 1929 volume.

"The reasons for consideration of proposed price revision at this time are largely the attempt to open up new and large markets on possible units of lower-priced commodities and also the present and prospective competitive situation, not only as regards other manufacturers of a material similar to cellophane, but also including the recent improvements in glassine."

That is the paragraph that Mr. Gesell read on his own statement. I point out there that what they are speaking about with regard to the prospective competitive situation not only with regards to other manufacturers of a material similar to cellophane means cellophane. This is 1930–1929, and Du Pont is zealously protecting its trade mark rights in the word "Cellophane," and throughout all of the Government's exhibits up until the
7698 Wax Paper Products case about 1937 one will find that Du Pont will never refer to another manufacturer's product as cellophane. It will always be referred to as a product similar to cellophane.

I must take cognizance of the fact that in regard to this document there is also the reference to glassine. This, your Honor, in our examination of all the documents we had available is the only reference we ever found to glassine with regards to price reduction. In fact, in one of the earlier documents in the defendant's submittal here today you will find an out and out admission by the Du Pont Company that the price of glassine is lower and they can never hope to get down to it. And it is. As Exhibit 392 pointed out, it is in a different class entirely.

Now, following the eighth price change we come to a series of price changes. This is the famous triple play that was developed on the Government's case in chief. There is announced a price change on May 26, 1931. As a matter of fact, therein is announced three price changes. This is the ninth, tenth, and eleventh price change, and I will show by the documents with regard to this price change that this was going to be the crusher.

Mr. GESELL. Mr. Minicus, the advance prices that were announced were less than the actual reductions made, and it is not therefore the ninth, tenth, and eleventh reduction. It is simply the ninth, if you want to use that phrase, and
7699 when we announced subsequent cuts we actually cut it much more than that.

The COURT. There goes your triple play.

Mr. MINICUS. I don't think so, your Honor. As a matter of fact, that only aggravated the situation when you see the purpose in these documents of these three price announcements. So let us turn to them and maybe we can clear up the situation.

On March 12, 1930, Mr. Walter S. Carpenter, Jr. wrote to Mr. Yerkes:

"Dear Leonard: You will recall that in discussing the proposed cut in cellophane prices I suggested for our consideration the announcement now of a cut to take place some time in the future, but I gathered from the reaction to this among the rest of you that it would not be desirable."

Then he goes on in this letter to explain the advantages of this price cut to be announced in advance, and he states:

"In addition it put anyone contemplating the manufacture of cellophane in this country on very effective notice that this represented our idea of the proper price level at present."

Mr. GESELL. That is an expurgated version of it if I ever heard it. He says "In addition," and he states his other reasons
7700 first and foremost. There is no reason to skip it. If we are going to go back and re-try the Government's case let us read it all in and have it right.

Mr. MINICUS. Your Honor, I submit we are not retrying the Government's case here. Mr. Gesell has stated in this court room only a half-hour ago that they only reduced their price so more people could use cellophane at a cheaper price and they could sell more of it. I brought out a lot of other reasons today why the price of that cellophane was reduced, and I think I have every right to in answer to that position.

Again on May 14, 1930, Mr. Hatt to Mr. Carpenter:

"Mr. Yerkes has handed me your letter of May 12th to him discussing the matter of cellophane prices and their relation to our present position as regards volume and considering also the very competitive angles affecting cellophane. The suggestion you made of graduated price declines announced in advance of their effective date is a unique one, and we believe that such action would affect our immediate position very nicely and it would accomplish the ends we are seeking."

Further along: "We believe that such an announcement at approximately the end of this month advising declines on June 1st,

August 1st, and on October 1st on regular cellophane only will perhaps accomplish all the points set forth in your letter. We are rather anxious to try out this plan to see what the effect of
7701 such a price procedure may be. It is entirely apparent that it cannot cause us any particular injury and it will definitely mark at least the level of regular cellophane prices so far as the consideration of this feature is important to prospective competition."

Then after those three price reductions another one became effective March 2, 1931. The announcement of that is in Defendant's Exhibit 349. With regard to this Mr. F. G. Hess writes to Mr. Hatt on July 2, 1931——

Mr. GESELL. Once in a while would you give us the exhibit number, please?

Mr. MINICUS. I certainly will. This is Government Exhibit 467.

"The Chairman stated at the meeting of our Board of Directors held on June 26th he had advised the Board that consideration was being given to another reduction in the price of cellophane probably around August 1, 1931, in line with our policy in the past, and with due regard for our current return on investment, development of prospective new uses for cellophane, and the present and future competitive situation."

There I submit, your Honor, we have three of them. One concerns these abnormal profits and the rate of return; the other one is the one that Mr. Gesell dwelt on; and the third one is the present and future competitive situation.

Then the fourteenth price change of May 2, 1932, announced in Defendant's Exhibit 351.

7702 In Government Exhibit 4482 of December 3, 1931, we have a letter from Mr. Yerkes to Mr. Lammot du Pont stating, "Thank you for your letter of the 2nd regarding the Union Carbide Company situation. It is encouraging to learn that we probably have a year before they get actively started. Perhaps by that time we can improve our price situation."

That I submit, your Honor, has reference to the situation that Mr. Roache addressed himself to the Court on when Du Pont thought Union Carbon & Carbide had a process for the manufacture of cellophane. As a matter of fact, it was never cellophane at all.

7703 Now, we have a hiatus of three years in these price changes. From 1935 to 1938 there were no changes in the price of cellophane. However, there were considerations of price changes, and with regard to those considerations, preceding the 19th price change of December 5, 1938, which is announced in Defendant's Exhibit 363, with regard to the suggestions made during

the period before that price change, we see a reiteration of these same policies with regard to prices.

Mr. Carpenter on September 15, 1936, again proposes use of the advance notice of price reduction, the one used in the famous triple play before. This time, however, he said it would be a good thing to do, because they were getting a little bit behind in productive facilities, and orders were way ahead of them, and that if we announce a price change now it will slow up these orders, people will hold off until the price change came along, and by that time we will have the productive facilities to take care of them.

And then on December 16, 1936, Mr. Hatt to Mr. Yerkes in discussing a proposed price change, there all sorts of formuli are considered to get a price change where the price will be down just sufficient to meet, to yield the mandatory 20 per cent operative return.

Now, on December 18, 1936, in Government's Exhibit 350, Mr. Yerkes didn't like that. The figures that Mr. Hatt gave would have shown a return of about 19.5 after all expenses.

7704 Mr. Yerkes doesn't say that is his reason, but he does say, "No, we won't take up a price change at this time."

And then on December 26, 1937, Mr. Yerkes again to Mr. Hatt, "Take the old example of the difference between P. T. and M. T., I notice that our today figures are almost exactly alike on the costs of these two. The total P. T. cost is 25.7 and the total M. T. cost is 27.2, the M. T. being actually cheaper than the P. T. Shouldn't we, therefore, endeavor to throw all the P. T. business that we possibly can over to M. T.?

"This brings up the broad question of whether we should reduce the price of M. T. a little and either leave P. T. alone, or put it up in an endeavor to have all of our business in M. T.?"

Now, they show a great rate of return on the moisture-proof product. They want to level that off a little bit to sell more moisture-proof and cut down on the P. T. How is it going to be done? Again through the manipulation of the price.

What other business can do that under normal competitive situations?

Now, we are going to have some more in subsequent documents here with relationship, your Honor, to that rigging of the M. T.-P. T. market.

7705 Then there was a price change announced in Defendant's Exhibit 364, which became effective October 30, 1939, and shortly thereafter, on August 28, 1940, in Government's Exhibit 4484, there is a statement of DuPont's price policy. And as I understand it, this is the price policy for the whole company, and the first position set forth under this—there are, I must admit, three positions given here—is entitled, "To Protect our Position

as a Source of Supply." "Guided, in part, by these economic analyses, we endeavor through quality service and price to maintain our position against the existing or potential competition of other sellers, and to protect the company's investment by making it attractive for consumers to purchase from us rather than to make their own investment and to manufacture for their own requirements."

Here again we have price in relation to prospective competition.

Now, after the war there was a price change on December 30, 1946; several months before that, on June 27, 1946, Mr. Brown, head of the cellophane sales department, wrote to Mr. Hines. In that letter he stated, "We also favor a greater proportion of increase of the three hundred P. T. to materially reduce the present eight-cent spread, and if possible, provide the same operating return as three hundred M. T."

7706 Now, there we are, your Honor, back on this P. T. relationship, and the effect of price on it.

Then in a general bulletin, Defendant's Exhibit 373, the second paragraph, we find this statement, "August 22nd, 1947, a price relationship now exists between our various types of film that provides a sound basis on which to build business for the future. These changes encourage the use of coated, anchored, and heavier gauge film by materially reducing their price differentials. The increased price of P. T. may cause some shifting of business to moisture-proof. In many instances moisture-proof film may be more effective."

Then on the next page of this exhibit is the announcement of the price change. And under sub-paragraph A there, there is the announcement of a price increase of three cents per pound on 300 M. T., and 300 M. S. T. moisture-proof rolls. And then B., a price increase on non-moisture-proof rolls amounting to nine cents per pound on 300 P. T., and four cents per pound——

The COURT. Five cents per pound.

Mr. MINICUS. Pardon me, five cents per pound on 450 P. T.

In the light of that situation, your Honor, it is not surprising to find that a great deal of this business has gone over to moisture-proof film, and I say that that was no accident, that wasn't caused entirely by customer desire. And we will show—we already have in our affirmative case—that there were people at that time

7707 who wanted to buy plain cellophane but couldn't do it.

They were steered on to moisture-proof film. And this entire shift of the plain cellophane to moisture-proof cellophane that has been shown in the tables is not an accident, entirely a matter of consumer preference, but was managed by the company to return a higher return on a higher-priced product, and that only a company with the power to control the price can do that.

Mr. GESELL. Your Honor, I can complete my comments before four o'clock on this section of the case.

The COURT. You have two minutes.

Mr. GESELL. I do not need that. I simply want to say this: It seems to me that again Mr. Minicus has misconceived the issue here. Competition isn't a dirty word. There is no reason in these documents we shouldn't think of the competitive effect of price reduction. The reason he doesn't like it is he is charging monopoly, and when he finds us referring to competitive considerations, whether they are foreign or domestic, he finds in that evidence of a predatory practice, when it is merely evidence of competition. And then in the next instance when he finds a document that doesn't refer to competition, he says, "Uh huh, monopoly. You didn't mention competition."

I say these documents he has been reading from show competition in the American sense of the word, in the free enterprise sense of the word, and that supports our view that normal
7708 business considerations, not predatory motives, governed our conduct.

The COURT. We will adjourn until tomorrow morning at 10:30.

(At this point the trial was adjourned to Thursday, November 1, 1951, at 10:30 o'clock a. m.)

7709 THURSDAY, NOVEMBER 1, 1951, 10:30 O'CLOCK A. M.

Present: As before noted.

Mr. GESELL. This morning, your Honor, we are in Volume 3 at III, "DuPont Research Program," is the caption. And the group of exhibits which I am going to discuss is that comprehended between 386 and 405.

Referring to our trial brief, may I direct the Court's attention to certain paragraphs which are germane to this portion of the discussion. Paragraph 20 on Page 10 is the first one. And then the group of paragraphs beginning at 27 on Page 12, and continuing through 31 on Page 13 are a statement of the various aspects of the research problem as we see it. And also, if your Honor will note, 39, which is a specific research paragraph on Page 15 dealing with the relationship between research and the production facilities.

As we understand the issue here, your Honor, the Anti-Trust Division is breaking drastically new ground. They are saying that a large company like DuPont should not engage in research; that research is bad or in some way evil, and that if a large company engages in research it may be inferred that that research is undertaken for the purpose of monopolization.

7710 The implications of that extraordinary new position, your Honor will appreciate, not only as to DuPont but as to business generally. We therefore place very great importance upon the research issue in this case.

The COURT. Where is that issue created in the complaint?

Mr. GESELL. It is not created in the complaint, your Honor, so far as I am aware. It is created on the opening by Mr. Minicus, and it has been emphasized as we have gone through various documents. But there is no assertion, that I am aware of in the complaint, relating to research. But the Government's position on the opening, which amplifies the complaint, is that when a business organization of the size of the Defendant engages in research, that it may be inferred that that is improper, it is bad, it is evil, it is done for the purpose of preserving what the Government calls the status quo ante, whatever that may be.

And so we have here a clear condemnation of research. I think you can find it in the pleadings to this extent: That in the pleadings we are asked by the relief measures to give all of our research to others, and the Government has stated in response to questions of the Court that we not only have to give the research we have already conducted to others, but in the future we must continue to do research and give that research to others, an obvious confiscation of research in its complete entirety, both for the
7711 past and for the future. And if there is any need of indication that it is being condemned, it is found in those relief measures.

7712 In the Government's trial brief the issue was also pointed up in a number of paragraphs, if the Court please. It says, for example, the Government's brief, that sums were spent upon research for the purpose of accumulating sufficient scientific knowledge and its instruments to control the pertinent technology, which is simply a sort of involved way of saying that the research was successful. As I understand it, we are met here, as far as I am aware, for the first time in any anti-trust case with an effort on the part of the Anti-Trust Division to condemn industrial research by large units. I have assumed, therefore, in approaching this that I should deal with the issue in terms that bring it down some way to the law suit in a way from economic theory in these terms: What was the intent of our research? and also look at it in terms of seeing if we can find what the importance of research was to Du Pont's position, whether you are talking about its position in the flexible packaging markets or whether you are talking about its position in the cellophane markets; and what we propose to show your Honor is that our research was done for wholly proper reasons; that there was no improper intent underlying our research, and that the research was responsible primarily

for Du Pont's position in this business, whatever you say the business is, whether you say it is flexible packaging materials or cellophane or what you will, and that if that research was legitimately conceived, efficiently and properly conducted, and be-
7713 cause of that Du Pont achieved the position that your Honor finds ultimately it is, whatever that may be, then that position cannot be attacked, for there is no basis upon which you can say that a large company cannot conduct research.

Certainly in a case where on the opening the Government concedes there are no complaints from consumers——

The COURT. I am having difficulty seeing the relevancy of such evidence to an anti-trust suit. That sort of cuts both ways, both against the Government and your case. I don't see what the issue has to do with the case.

Mr. GESELL. Let me state it from our point of view. I have never understood the Government's position, so there you and I are on common ground, your Honor.

But from our point of view it is this: The Government says that Du Pont started out illegally in this business with an illegal arrangement with the French, and it built up fictitious barriers to trade and engaged in various predatory practices, and that it achieved its position by reason of those specific restraints, if you will. We say no. Initially, of course, we say they were not restraints, that they were proper; and, second, we say that our position is not the result of a particular contract or incident which the Government condemns, but was the result of creative research through which we developed by successful methods and legitimate methods a better product, which received the greatest ac-
7714 ceptance from the consumer, and that if we can show your Honor that our position is founded upon research legitimately conceived and conducted, then there is no basis upon which that business can be attacked, whether it be 100%, 75%, 20%, or whatever per cent it turns out to be.

The COURT. I see your point. It ties in basically with your patent position.

Mr. GESELL. Yes, and with our whole story as to why it is Du Pont cellophane grew and developed. But what the Government's position is on it, other than this economic theory that big companies, what they call big, fat monopolies should not engage in research, I don't know. But we propose to show that the research got us where we are and that it was legitimately conceived and legitimately conducted and enormously efficient and effective.

7115 Now, our proof, your Honor, of course, like everything else on our case, is both testimonial and documentary. And I want for a moment to make reference to the testimonial proofs

so that your Honor can relate them to the documents which we are going to discuss. We propose to have three witnesses, your Honor, who will discuss the problem in this way: We first propose to have Mr. Cullen, whose name you will see here, who was the original plant manager of the first cellophane plant in Buffalo, and have him discuss what was the technology, what was the situation at the time we started with the French.

And then we propose to show by two witnesses who will follow him, one Mr. McCune and the other Mr. Mitchell, the development of the company's research, both on the production level all the way up through the status of process and manufacturing development on the one hand, and through the field of the developments of the quality and improvement of the product itself on the other. And we hope in that matter to present to you through those three witnesses, combined with the documents, a picture of what were the dynamics of this business in terms of its creative research and industrial efficiency, for the purpose of showing you that it was that which resulted in DuPont achieving whatever position your Honor finds it has in whatever market your Honor finds it is sold.

Now, if I may for a moment, before turning to the documents, I would like to emphasize to your Honor how this
7716 research cuts across all lines of the case. In the first place, of course, it has to do with the efficiency of the plant. It is the determining factor, in large part, upon plant capacity.

In the second place, it has to do with the quality of the goods; their acceptance in the trade, their variety, and their characteristics.

In the third place, research has to do with cost of manufacturer, and hence, price, for as research achieves efficiencies in operation, those may be reflected in price.

Research, also, your Honor, determines, in large part, the ability to serve the customers in these markets, for as we already have it in evidence, we have tailor-made services for specific uses, and as you have seen from these trade reports, an enormous amount of service to customers of a technical character; and ultimately, of course, research determines your competitive position, your competitive ability, and the markets that you are able to penetrate and in which you are able to sell.

And I emphasize those obvious points, if you will, your Honor, to make it clear we are not dealing with a man in a laboratory with a test tube who is stirring around to see what might happen. But we are dealing with the very guts of this business, the thing that determines capacity, the thing that determines price,
7717 the thing that determines competitive ability, the thing that determines service to the customer. And it is for those

reasons that if your Honor finds, as we are convinced you must on this evidence, that DuPont's growth and acceptance and position here was due to this research, he must find a third ground for dismissing the complaint.

Now, there is one other factor which I want to mention by way of a preliminary statement on this point. This research, your Honor, started with the start of cellophane manufacture, and it continued and continues today. It has been insistent and unceasing. And this case is not like other cases to which Mr. Minicus has reference from time to time. This is not a case brought in a mature industry, long after patents have expired. This is a case brought against a concern in the very mid-stream of its creative industrial effort.

And we are concerned in this case with the period of the development and improvement of the processes and products in a competitive market. And it is that that is challenged. And yet if it were not for that research, cellophane would still be catering to the high-priced perfume bottles and the carriage trade.

So that when the Government attacks research, it cannot say, as it seeks to say, that this is a static business, that this is a business where the markets were there, you just reached out and took them; and they can't say that the research was suddenly some-
7718 thing developed later for the purpose of preserving what they call the status quo ante. This research was the reason for the growth, was part and parcel of the growth, and they are attacking it at the time of its fullest creative influence, as far as consumers are concerned, as far as merchandising is concerned, and as far as the company is concerned.

Now, the final point: Not only is this research that started and carried from the beginning, but this is research that was applied. This is not research done for the purpose of creating false barriers, of anticipating some improvement, if it might be necessary. This is research that jumps from the test tube to the plant to the consumer with a startling rapidity, and is indicative of the dynamics of this business. And as your Honor watches these documents, you will see the constant pull and tug of competitive influences on the research, and the application of the research to the improvement of the production, to the reduction of the price, to the entering of new markets, to the improvements of service to consumers.

I speak with considerable feeling about this, your Honor, for if what DuPont has done in this research field of cellophane is to be condemned by the Court, it is a condemnation of the entire DuPont Company in itself, in all its activities, and the implications of it throughout the country will be enormous.

And who is it that says the big companies shouldn't engage in the kind of research that improves the product and
7719 lowers its price? Mr. Sherman never said it in 1890. That we are sure of.

Now, if I may turn to the exhibits, may I direct your Honor's attention first to 386 appearing at Page 716. I believe your Honor's recent visit to the Richmond DuPont Cellophane Plant, in company with Government counsel and myself will give some flesh and blood to this schedule.

Now, let me take up each of these columns and see if I can show their significance.

Will your Honor first look at the column next to the last on the right entitled, "Average Casting Machine Speed in Meters a Minute." You will see there an extraordinary growth from 1932, when the figures are first available, of 30.3 meters a minute, up to the present experience, which is in excess of 80 a minute.

Now, your Honor, what that is, as you will recall, is the speed with which the film moves through the casting machine, down through the baths, and the drier, and of course, it is one of the most dynamic measurements that one can have of plant efficiency. And look at that enormous growth which has taken place from 1932 up until the present time. A casting machine, in other words, is turning out almost three times what it did. But there is something more startling about it than appears on this schedule,
7720 when we look at the Government's Exhibit GX–410, where we have the figures of Sylvania, and what does that show? In 1935, for example, when we are able to run at 42, Sylvania is running at 22.

In 1940, when we are able to run at 49, they are running at 33.

In 1945, when we are running at over 51, they are running at 35.

In 1947, we are at 65, and they are at 45. And the most they ever show they are able to reach is 55.

Now, what does that mean, your Honor, in concrete terms? That means that when DuPont and Sylvania are side by side, DuPont has it all over them in terms of its production, productive efficiency.

If you consider that, that is one of the reasons why we had more to sell. That is one of the reasons why we had lower costs, if we did; one reason why we lowered the price, certainly, and it is a measure of the relative efficiency.

Take a look at some of these others. Well, before we leave that, I might say the other exhibits show that we are getting in 1947, your Honor, we are getting 25 per cent more per machine as of the date this suit was brought, we are getting 25 per cent more production than Sylvania.

The COURT. Would you tell me what the symbol "N.A." means?

Mr. GESELL. Not available. There is a little note
7721 at the bottom of the schedule, your Honor.

The COURT. I see it.

7722 Now take these other columns. Take the average pounds per casting machine day, and you will see again the enormous growth which follows closely the growth in speed. That is one of the middle columns there, tripling in the period the figures are available. Look at what happens in the coating tower, the last column. In 1931 in a coating tower per day we are able to coat 3,956, and today we are coating in excess of 15,000 in the same tower. Look at waste, the measure of efficiency. That is the loss that the mill rolls experience during the packaging process and elimination of items that fail to pass inspection. Look at how it has come down from 15% in 1924 to 4.2% today.

Now, one more fact, your Honor: The evidence shows that in the period from 1947 to 1950, Government's Exhibit 394, Du Pont had the same number of casting machines, and in that period its productivity—that is why we have all been litigating around here with depositions and discovery and preliminary motions—the productivity grew in 1947 from 133 million, five, to 202 million, eight, and no increase in machines at all. So from this schedule and the related Government exhibits to which I have referred, your Honor sees a very graphic picture of the productive efficiency of this company.

Now if you will turn the page to Exhibit 387 you begin to see why that took place, because there is the picture of what Du
7723 Pont spent on technical activities, technical assistance to production, assistance to sales, fundamental research, and so forth. Starting with $9,139 in 1924, its research in 1950 cost $2,782,000. This is cellophane, your Honor, and the total expenditures in this period for research average more than one million dollars a year or $24,361,000. That is one reason that cost comes down. Machines become more efficient, new materials are developed, customers get better service. It is because of this creative technical work which is measured, to be sure, only in part, but measured at least by the expenditure of these enormous sums.

Now, if Du Pont was prepared to spend that money and it resulted in a better product, in a lower price, in greater efficiency, where do the anti-trust laws say that Du Pont should not be permitted to retain its plants and to continue its research?

Now I want to take these documents up, your Honor, and I am going to do it in this section in some detail. The first series have to do with the development of moistureproof cellophane. We have documented that with these illustrative examples, because, if your

Honor please, we are, after all, concerned here with a product which during the period of this case was a patented product invented and discovered wholly by Du Pont. So it may be germaine to find out why did Du Pont get that moistureproof patent? Why would they get a moistureproof patent? I think these illus-
7724 trative documents will show how it came about and why it was done.

Now, your Honor, this is 1924. We can start with the premise that it is not done for the purpose of preserving the status quo ante, whatever that may be, because the status quo ante, if it is anything, is a small, struggling plant in Buffalo just getting under way.

The first Exhibit 388 is a letter concerned with a complaint. It is to the Chemical Director from the Sales Manager, involving the National Biscuit Company, and what does the National Biscuit Company say in 1924? "Their principal objection to cellophane is the fact it is not moistureproof. They have a moisture test machine which shows that moisture will penetrate cellophane in about one hour whereas they have some wrapping materials which moisture will not penetrate under fifty hours." The salesman writes the Chemical Director and he says, "Look here, here is a big account and the other materials have got it all over us." You will see the text in legible form in 388A.

What does the Chemical Director report back? Look at 389A.

"The permeation of Cellophane by moisture is a charactertistic which at the present time we have to admit.

"The change in the composition of Cellophane which will result in the water-proofness required by the National Biscuit
7725 Company, that is, an increase to 50 times its present resistance to permeation by water vapor, is a thing which will probably require years to accomplish."

Then in 390A you will see another instance of it. There they are worried because the cellophane paper is sticking to the candy, whether some composition can be found which will cure that, and again the Chemical Director, still in 1924, in 391A, points out that that can't be met by cellophane today.

Then in 392 we have an early letter in 1924 signed by Mr. Cullen, the Plant Superintendent, who is going to take the stand, and he is talking about the problems with cellophane in 1924. He said, "You asked us to give you a list of items that would be interesting to have Dr. Benger investigate." You will see he talks about the air pockets in the feed lines, which of course made the material full of streaks and unusable, and he says, "Considering cellophane manufacture and disposal, and not just the manufacturer, we believe the investigation of a filler that will make cellophane moistureproof and moisture-resisting is a study of the very first importance."

There is no talk here, your Honor, about "Let us develop moistureproof cellophane and exclude competitors. Let us see if we can't make some kind of a material that looks like something, but it really isn't, and we can get some kind of a hold on it by a patent." These people are talking about the market place
7726 and talking about the fact that their product is not satisfactory and they have got to improve it if they are going to get out of the carriage trade.

Then there is a very significant document in 1924 by Mr. Benger, who is the Chemical Director, to the Production Manager on the subject of waterproof cellophane in which he stresses the importance of the company doing something with respect to that problem, and he analyzes in detail various suggestions of a technical character as to how it might be made moistureproof. Then he says:

"You ask how extensive an investigation of this kind might be and what it would mean to the Chemical Department organization. The second part of the question can be disposed of by a statement that it is my opinion that this problem can only be handled in a satisfactory way by the employment of a man who is carefully selected for the work and who is assigned to no other problem. If the problem is worthy of attacking at this time, it should receive the constant attention of one man."

Then he sets up a preliminary investigation budget of $10,000 and says they have to really go to work on that, and he said after we spent that money and had the man on the job we would have some idea as to whether the problem was worthy of further consideration, and he recommends on page 732 four recommendations:

"The problem is a long one which will probably in-
7727 volve the expenditure of several thousands of dollars before any indication can be obtained as to the possibility of final success.

"The qualifications of a good man for this work are peculiar and it might take a long, careful search to find a man suitable for carrying on the study.

"Waterproofing is a matter of degree and I would not hold out any hope of producing from viscose a product which would be absolutely waterproof. The water-resistance of Cellophane is probably capable of being tremendously increased but to secure absolute resistance to water should be thought of as an extremely remote possibility.

"The cost of waterproof Cellophane would be almost unquestionably higher than the present product."

He recommends they go out and try, and back from the Production Manager is a letter in which he says, "I talked to Yerkes and he says go ahead," in 394.

Three yea later in 395 you see reference to the fact that the product has been achieved, and the Government exhibits are full of the significance of that achievement of moistureproof cellophane. I could not possibly start to read all of it. But just to read a few, I think we can show what the Government evidence indicates.

By January 1927—this is in 1927—experimental M. T. had been made nine inches wide in small quantities. It
7728 was developed to aid outlets to products and was expected to claim a fair premium in prices. Appropriation made to install first coating machine. That is in 481.

In 1929 they started reporting, in Exhibit 431, Du Pont's development of M. T. enabled it to regain business from importers and develop new business, particularly those industries which required moisture retaining or repellent wraps.

In 1930 in Exhibit 435 they report that increased consumption of Du Pont film in first half 1930 was largely due to acceptance of moistureproof "in the baking industry and particularly in the cigar industry where a virtual revolution of the merchandising methods has been occasioned."

Again in 1930, in Government Exhibit 455, they say use of moistureproof in the baking industry had definite economic advantages in eliminating stale returns, flattening out the peak of manufacture, reducing the number of deliveries required and minimizing the investment in cooling devices, trucks, display cases, et cetera.

They talk throughout these exhibits of the tremendous inroad that they were able to make into this market with the development of this new product, and that is called preserving the status quo ante.

The next exhibits develop phases of this research. Here
7729 is one in 1930, Exhibit 396, your Honor. It is a meeting of the Executive Committee of the Du Pont Cellophane Company. It is a minute in 1930. The subject is "Improvement in Quality of Cellophane," and let me read the last of this minute which discusses various ways of improving cellophane and the fact that this will lead to greater expense. Now, mind you, this is supposed to be a monopolist talking, your Honor:

"The Committee do not mean to insist at this time that production be curtailed by reason of experimental work along the above-mentioned lines, but do feel that they should be prosecuted at the earliest possible moment, and that the basic idea of improved quality should perhaps be more forcibly kept in mind rather than the slight increase in manufacturing cost that might result by adoption of these improvements."

7730 In other words, we want to get the best product we can on the market so that the people will buy it. And know-

ing that there are in a competitive market, they are prepared to take the added cost to achieve the quality of product that is required. And this is supposed to be someone who can sit back and turn the faucet on and off as he chooses, bring the business out or into his company as he wishes, and engage in research only to preserve the status quo ante.

And back comes a letter in 397 from Mr. Hatt, and I direct your attention to the last paragraph beginning at Page 738, after he reviews the advice of action by the Committee, in which he says, "Our whole thought is that anything we can do to improve the quality of cellophane will be reflected in its wider use and more satisfied customers, and nothing of this nature will be rejected solely on a basis of cost alone, except with the fullest consideration as to the relation of cost to the benefits to be secured."

Now, Exhibit 398, your Honor, I am just going to indicate what it is at this time. It is simply a list which we prepared of various research project materials, which has been handed to the Government in considerable volume, relating to various experimental work which was done of various kinds. And
7731 when we come to the witnesses, we expect to review these projects, and related work in some detail. And this is simply going to serve at that time as a convenient reference to the witnesses' development of the research testimony.

Now, what we have sought to do in the remaining documents in this section is to give your Honor a glimpse into this research activity by way of giving you illustrative technical department appropriation requests for specific research projects.

The volume of this material, your Honor, relating to the expenditure of this $24,000,000 is enormous. And all we can do here is give you some illustrative examples. What we have done is, we have taken the first two or three requests for appropriation usually under the first of each project under each of the major headings that appear on 398.

What was the origin of the anchoring research? What was the origin of moisture-proof composition research? Casting research, adhesive research, and I emphasize again, your Honor, that this is supposed to have been research undertaken with the intention of excluding others, predatory research.

Now, the first group of documents relates to anchoring. If I may, your Honor, as a prelude, make clear what that in-
7732 volves because we will have considerable discussion on it as the case proceeds.

After moisture-proof cellophane was developed, it was necessary to find some means of making the coating adhere to the film, because in many instances as the coating came in contact with the materials that were wrapped in it, either because of grease or

because of water or because of rancidity or acids, or other developments, the coating disappeared and the cellophane lost its essential moisture-proof characteristics.

And this research was undertaken for the purpose of developing a method of anchoring the coating in a way which would permit the utilization of film in many different kinds of wrappings. And the developments that took place were first in the direction of finding out how that could be done, and second, finding out ways and means of doing it cheaper and cheaper and cheaper from the production point of view.

The evidence will show we actually had to go up through the coating tower twice initially to receive this result.

The COURT. Let us look at DX-390.

Mr. GESELL. Yes.

The COURT. In the upper righthand corner, do you see
7733 the word "accounting" and then certain individuals' names under that?

Mr. GESELL. Yes.

The COURT. What does that mean?

Mr. GESELL. This was referred, I assume, to these people. Here is an appropriation request that went to the accounting people, the chemical people, the engineering people, and the operating people.

The COURT. Now turn to the lower lefthand corner where we have "estimated monthly expenditure," an item of $1580, and then for the months of January, February, March and April, $395 respectively for each month.

Mr. GESELL. Yes.

The COURT. What does that $395 include, salaries to the laboratory workers?

Mr. GESELL. Yes, and any costs of experimentation which were——

The COURT. What could you do for $300 a month?

Mr. GESELL. You could put one man on a job fulltime, your Honor.

The COURT. I see.

Mr. GESELL. In 1928.

The COURT. That's right, before taxes.

Mr. GESELL. You will find the basis of the forecast, your
7734 Honor, Mr. McGlothlin points out to me, on Page 744. You will find the work will be carried out by Mr. Siemann, Supervised by Mr. Hyden, and in which a program of work is laid out for four months, and the period.

Now, your Honor appreciates that this project, and you will see as it goes along, was constantly being added to. This is project CX-78.

These appropriation requests come at stages. You spend some money. Is it worthwhile? You spend some more if it is. Is it worthwhile? You spend some more. And the total appropriation, for example, on anchoring runs into much, much larger figures than $1,580. This is the initial, or one of the initial appropriations for the work.

We are going to show the extent and character of the total project through testimony.

Now, may I ask your Honor to look at Page 743, in the first paragraph they are setting up what the job is, and it says, "Upon contact with water the coating is loosened and its moisture-proofness is destroyed. If the coating were strongly anchored to the film a product adapfable to more uses would result."

And then what is the sales department's view about it?

7735 They say it would be heartily welcomed by the customers, and they point out its special utility in the wrapping of frozen meats and fish, for example, where the whole effectiveness of the wrapping is destroyed because the anchoring comes off. Then they say preliminary work has been done, and they set up what it is. And they apparently think it should go on.

But now look at II and III, your Honor, 744. One is entitled, "Reasons for Doing this Work," and the other is, "The Benefits Expected."

Well, you do not see any reference there to predatory research preserving the status quo ante, and all the other language terms we have been getting from the Government table.

You see that the reason for doing the work is in order to make this cellophane usable by certain people where it can't be used now; "a more closely adhering coating will undoubtedly increase the uses of moisture-proof cellophane, which should be reflected in the increased sale."

Benefits expected. "The above-outlined work should lead to a better product, superior to the present moisture-proof cellophane for many uses, especially where water may come in contact with the film."

The most important cellophane patent in existence today

7736 is DuPont's anchoring patent. The development of an anchored film.

You see here, Judge, the beginnings of the early stages of one of the most significant developments of DuPont research.

And then we follow it through. You will notice the dates go along here. These are illustrative only, but the monthly expenditure is stepping up, and the period of work is stepping up. And why are they making this expenditure in the second paragraph on 746? This is now up to 1930. We have moved along a couple of years. "Results in the laboratory have led to the production of

such a film but the details and technique of adapting the laboratory developments to plant practice have not been worked out."

And so more money is put into the business, and work, and the benefits expected again on 747, still the same objective. And the project goes on again in 399.

Why does more money have to be spent on this research? We have been going over two years. You will see it in the last paragraph above II on Page 749, they found that the drying oils they were using gave good results in the laboratory, but when they got out in the plant the oils were too slow and the whole process was held up. So that we had to find some new way, and back they come with more men, more money, to see if they can find a
7737 way of doing it. And they keep it up, as you will see, in the subsequent exhibit.

Now, documents of this kind, your Honor, exist in great number in the company, a specific problem brought in by the salesmen or by the production people, and a concrete attack on it, in a business-like way, for the purpose of achieving a result which is not related to predatory activities of any kind, but is directed toward the sole purpose of making a better product or a cheaper product. And because we were good at it, because we were successful at it, because we made inventions, the Government says that we were seeking to preserve the status quo ante, and that big companies should not do this.

Now, coatings, we come now to one relating to that phase of the activity. There was an enormous amount of work done on various kinds and types of coatings. Some coatings had to be developed which would permit more moisture to pass; some had to be developed which would permit less to pass; some had to be developed which would not create reactions with certain specific types of products; some had to be developed for use in export; some had to be developed for use in war purposes; some had to be developed for use in humid climates; some had to be developed for use in dry climates. And there are scores of different types of what
7738 the Government's very first exhibit showed, tailor-made cellophane to meet the requirements of a particular trade or use.

Of course, here we are concerned with the very early work, in this example, directed to the improving of the coating itself.

You see a description of the work that is contemplated, and what are the reasons? We are talking about intent here, your Honor. The charge is this predatory intent.

Look at 754. It says "The average quality of moisture-proof cellophane is good, but there are some rolls of regular production which are distinctly superior in their resistance to the permeability of water vapor. It is not known just what factors produce these

unusually good moisture-proof films. Work should be done, therefore, to make further improvements in the quality and uniformity of moisture-proof cellophane."

In other words, they have been testing the film, some film is better than others. Well, is there anything abnormal, unreasonable, unbusinesslike, predatory, about somebody saying, "Look here, why is that happening, why are some of these runs better than others?" And then setting up a project to decide how you can get a better film? Who is going to be hurt by getting a
7739 better film, unless it be the competitor who isn't on his toes and can't do it? And if he is hurt because he can't get a better film, isn't he suffering, as he should, the results of competition?

If these men hadn't decided that they would find out why one film was better than another, they wouldn't have improved it. To me the proposition seems so patently clear.

Now, there is more on the question of quality. You will see in Exhibit 400 that variations of over 200 per cent are occurring between the two edges of the film in terms of uniformity. And your Honor appreciates from the trip through the plant and the other evidence, the necessity of having a uniform product that will roll evenly on the rolls, and when one edge is 200 times the gauge of the other edge, well, of course, that has to be remedied, or you are going to have lopsided rolls or no rolls at all.

And why? What are the benefits expected from the research? "This work is expected to lead to an increase in the quality of moisture-proof cellophane and a more uniform product."

And so it goes down through these different examples of the various phases of the work.

In the casting machine, you see work on drier opera-
7740 tions in 401, and the speeds.

I direct your attention now to 762, which sets up some of the studies contemplated there of a production character.

402 goes on in the production department again with the reasons and the benefits, and then we come over to sealing. And I want to stop on sealing, because there is another key area.

We have mentioned now anchoring, coatings and production or casting machines, and now sealing. When cellophane was originally made, your Honor, it couldn't be made to adhere to itself, and that created a whole host of packaging problems. First the company did some work trying to get glues of some kind that would do the job. They made their own glues. And then they set up adhesive manufacturers who would make these glues for the trade, but that was expensive and it didn't work. And so they said, "Maybe we can find a way of making cellophane so it will

heat seal to itself, so that if you take two pieces of cellophane and put them together under heat, you can make a seal."

Well, that involved an enormous undertaking to find a way of getting a coating which would take this temperature and result in a seal, and not at the same time spoil the characteristics of the film, make it tacky, prevent it from running, destroy the moisture-proofness.

7741 And after an enormous amount of work over a long period of time, of which again we see here just a few samples, cellophane is now produced so that no matter where you put two pieces of it together, if it is of the heat-sealing variety, and you apply heat, it will seal, not at one little point, not at one little strip, but no matter how fabricated, no matter how cut. And that has made it a superior packaging material.

And this work on that area was intense creative scientific work conducted over a long period of time again, for a very obvious and proper objective.

The description of the work appears in this early one in 764, and you will see the reasons for doing the work as set forth on Page 765, the sales people say they have to have it, there are complaints from the trade. This quality has to be improved. And then in 403 I direct your Honor's attention to 403–A, because it is a long document and the first printing is illegible, you have a review of the work done in this adhesive field.

You can see from the outline of the study, of which only a portion is here, the variety of problems involved. There is a detailed history, which I am not going to read, set out under 3, which shows the whole course of the work, and the different

7742 steps taken, the work with adhesive manufacturers, the studies of particular markets, the studies of particular uses, the difficulty in dealing with glue, the very significant item on our market point over on Page 782, and then you see in 404, the next exhibit, and the ones that follow, are worked with the trade in developing these adhesives.

And if your Honor will bear in mind these four areas of research, anchoring, sealing, production and coating, I think as the proof comes along through the witnesses, we will be able to emphasize those four main channels of activity.

In doing so, we are choosing them because of their importance and the scope of the work done.

The COURT. What was No. 3 again?

Mr. GESELL. I don't remember the order. I will give you all four, your Honor: Anchoring, sealing, productive efficiency, and coatings.

There were all kinds of other projects. The Government's evidence already contains numerous references to many of them,

fundamental research, special research of every kind. But we are going to emphasize these four, because we believe that these four are the avenues of research which created for DuPont the business it has, and which made its product superior and acceptable.

7743 And we have shown as to these four by these illustrative documents that in each case the intent and the reason underlying the work was legitimate and proper.

I should, your Honor, offer these exhibits for the purpose of the record. I neglected doing so at the beginning. I offer Exhibits 386 to 405.

(At this point, Defendant's Exhibits 386 to 405 were received in evidence.)

Mr. FITZPATRICK. If your Honor please, the Government has little comment in regard to the documents which have just been presented, because, your Honor, they are essentially foreign to the basic issues of this case. This evidence is directed not to meet an issue raised by the Government, but rather to meet a mythical issue which the Defendant himself has interjected into this case.

We have here, your Honor, a situation identical with that of the market. The Defendant is casting a cloud over the real issue by creating imaginary ones.

I respectfully refer your Honor to Page 2356 of the transcript. At that point the Government had presented its evidence in support of the complaint, which had charged that the Defendant had acquired complete control and the pertinent technology relating to these products through monopolization of patents and

7744 various other illegal patent practices.

The Defendant at that point of the transcript stated, and I quote, "Fundamentally I think we can show that his attack is on research. His is an attack against any company which spends sums of money to find out new things and places those new things in the public domain by the patent law."

Now, your Honor, if that were the offense charged, this evidence might have some probative value. But it is not the offense charged. And hence the evidence offered is illustrative only of the defendant's misconception of the issue.

The Government does not deny, but on the contrary readily admits that the Defendant has spent the huge sum of $24,000,000 on research in this field.

7745 The Government takes no issue with research per se, nor does it stand opposed to companies spending large sums of money on research. The potential evil lies not in the research per se, but rather in the end results which may flow from that research.

We are the first to admit that extensive research is the very cornerstone of a successful industrial patent program. Patents

flow from research, and from the patents flow the patent practices of the modern corporation, and it is on those patent practices that we cast a watchful eye. If the practices fall within the domain of legality, then the research has served a beneficial end and the public has been the benefactor; but, on the other hand, if the patent practices extend into the realm of illegality, the research has been bad and as such in the hands of a monopolist constitutes a powerful weapon for industrial control.

In the case at hand, the Government's charge is not directed to big research per se, but rather to the over-all technological and patent practices of the defendant which have flown from that research and which have caused the monopolization of United States Letters Patent and the rights thereunder with the intent to strengthen defendant's technological control of the industry; and in support of this charge, your Honor, the Government points to

7746 the statement of Mr. L. A. Yerkes himself back in 1933, and I quote from GX-323 already in evidence, at page 2060 of the transcript. Mr. Yerkes writes to Farmer and Hatt, and Mr. Yerkes says:

"I don't know just what the Cohoe patents are, mentioned on Page 3 of Haff's letter, but I quite agree that if Cohoe has patents which would improve our patent position, they should be looked into, and if they do show promise of being valid and do show promise of giving us a monopoly in the manufacture of bands, and if furthermore they can be bought for a reasonable price, this should by all means be done."

That is our charge, your Honor, and this evidence of the defendant does not meet it.

Before we pass from these documents, I would like to make one or two comments: We have had some statistics come in here today on the relative efficiencies of the Sylvania Company as against Du Pont. Government Exhibit 561 already in evidence clearly illustrates that for the four years immediately preceding the filing of the complaint, Du Pont had 70% of the casting machines in the industry; Sylvania had 30%. The Du Pont production for that same period was 76%; Sylvania's production was 24%.

Now, there the productive capacity of Du Pont was only 6% higher than its machine number over Sylvania. What I meant to say is that the relative efficiency increase of Du Pont over Sylvania amounted to only 6% for that period.

7747 I would also like to point out to your Honor that here the defendant is directing the Court's attention to the fact that Sylvania is not very efficient. Now, that is when they are talking about research. That is when they want to convince the Court that their research program is terrific; but what do they say when they start talking about monopoly powers?

In Section 9 of their factual outline they talk about the great competitive effect Sylvania has upon the industry, and they say that Sylvania has increased its capacity since the war to the annual rate of a million pounds of cellophane. Now, they can't blow hot and cold, your Honor. Either Sylvania is efficient and it produces a lot of cellophane or it isn't efficient and it doesn't produce much cellophane.

Before we leave that completely, it is very interesting to note here in passing that even with all its research, the defendant's Exhibits 392 and 393 clearly point out that Du Pont was not the first party to coat plain cellophane. Reid had coated cellophane with various ingredients to make it tougher, and the French had coated cellophane with varnish to make it water resistant long before Du Pont coated it to make it moistureproof.

MR. GESELL. Of course, if you read those exhibits you will see they haven't succeeded in getting a flexible wrapping material.

There is no misconception here, your Honor, about the issue; it is the Government's effort to avoid it, and I
7748 think we ought to have this out because it is pretty fundamental to the case. They seem to be saying this, as I now understand it, that it is all right to engage in research per se, whatever that means, but it must follow that if it is all right to engage in research, it is all right to apply the research for the benefit of the consumer and the benefit of the company; but they say it is the patent practices. They say they have got a lot of patents; but if the patents flow, your Honor, from research, and they do as night does from day, because as research develops an invention, a patent issues on the invention, and if that research was legitimately conceived and legitimately conducted, what is illegitimate about applying for a patent on it, when the Constitution and the laws of this country say you should and can and the stockholders will say you shall; and to talk about the proliferations of patents and blocking and fencing and to ignore the origin of those patents, which is in research, is as unrealistic on the part of the Government as their fictitious concept of a cellophane market unrelated to the competition which exists in it; and the charges made in the trial brief—and there was no answer to that from Mr. Fitzpatrick—and the charge was made in the opening—and there was no answer to that by Mr. Fitzpatrick—of course he wasn't here at that time—that this research was conducted for the intent of monopolization and for the intent of preserving
7749 the status quo ante. We have shown clearly that neither is the case.

Perhaps your Honor would like to take a mid-morning recess at this time.

The COURT. We will recess for ten minutes.

(At this point a short recess was taken.)

Mr. GESELL. The rest of this volume, your Honor, is under Roman IV, Du Pont distribution. It covers a series of exhibits going from 406 down on through the end of the volume.

The issues as we understand them that are tendered on this phase of the case are stated from the defendant's point of view in Paragraph 18 and Paragraph 19 of the defendant's trial brief and Paragraphs 22 and 23 of the trial brief. I wish to offer the entire group of exhibits from 406 to 503 in evidence, with the exception of Exhibit 436, which we withdraw, and with that withdrawal eliminate that section of the outline.

(Defendant's Exhibits Nos. 406 to 503, with the exception of No. 436, were received in evidence.)

The COURT. What section would that be?

Mr. GESELL. "Example of Sales Effort." It was a single exhibit, Roman IV-C, your Honor. We are withdrawing that exhibit. We will just have to draw a line through that on the book.

7750 Now, these first few documents which come under this head "In General" are merely designed to give your Honor a bird's-eye picture of three essential phases of the distribution question. The first two, 406 and 407, establish in summary form precisely what Du Pont's distribution practices are as of today. No. 407 summarizes what our policies are as to prices, conditions of sale, discount, converters, sales agreements, distributors, and so forth, and gives you in one convenient place a picture of the current distribution situation. The Government's evidence has touched on practically all phases of this—the gradual elimination of the distributors, beginning in 1943; the elimination of the quantity discount early in 1947; the change in the converter discount; and other matters which are summarized in this single document.

Then following that we come to a document to which I believe your Honor will have occasion to have reference from time to time. It is 408. It ties in with the material that I was just reviewing earlier this morning, as well as the distribution. It is the technical section of the salesman's book which he has when he sells the product, and you will see, turning to page 2 of 795, and running down through there, a reflection of the particular types and applications of cellophane available for specific end uses. You can see all the different grades and kinds not listed in their totality, but related to the specific end uses, and it gives in a rather

7751 clear way an indication of the variety of the products and the purposes that the different particular types of cellophane are designed to serve.

The COURT. No. 796, the last item on that page, what kind of candy is that?

Mr. GESELL. Hydroscopic candies?

The COURT. Yes.

Mr. GESELL. I don't know. Does anybody know?

Those are, I understand, mints and other candies that readily pick up water.

Where you see against the type, your Honor, such as over in 798, the designation A—for instance, under "Fresh Meat," "M. S. A. T. 80," the A refers to the anchored film, the S is the heat seal, and T is moisture, and you can see just in the very designations the appearance of some of these research factors that I was talking about. You will recall that when they started on the anchored film, the meat people wanted such a film, and here you see it developed and being available for that use.

It runs down by detailed end uses and detailed types, of which there are over fifty, and a great variety of different applications and different packaging purposes.

The COURT. Now let us go back to Richmond for a moment. Were all of these different types being manufactured in that one plant?

7752 Mr. GESELL. No, your Honor. Some of these, for example, the tango types, all the colored types, are manufactured, I believe, only at Buffalo; they are not manufactured at Richmond. I believe, on the other hand, that practically all of the grades of moistureproof which are not colored film are manufactured at Richmond. Your Honor will recall that that depended largely upon the composition of the bath and the different coatings applied. I understand all except color. The colored are at Buffalo, and that involved different coatings and different applications all the way through.

Now, if you will turn to 409, you will recall when we were going through the market section your Honor asked me for information as to the relative significance of these various end uses for cellophane sales, and I informed the Court it wasn't yet in the record and was coming along later in the proof. Now, here as of 1950, showing also some information for 1948 and 1949, but prepared in 1950, you will see a breakdown of the end use of cellophane by major categories, as well as a breakdown as between the direct and indirect—how much of cellophane is sold directly, for example, for bread and cakes; how much is sold indirectly through converters; and this is our basic source of reference for end use data.

The next group of exhibits, beginning at 410 and going over to 435, come under the heading IV-B, Promotion of Bag Making

and Printing by Direct User. Now, this, your Honor,
7753 is significant in two respects to the issues of the case. We will show by this an example of the creative sales effort and competitive effort that was necessary in order to get cellophane into a position to compete, but more importantly, coming in this section, it serves to show as another example how Du Pont failed to take the type of action one would have expected had they had the monopolistic intent to control outlets, of which the Anti-Trust Division is talking about. If this is simply a story of Du Pont going out and working with machinery manufacturers for the purpose of developing various types of machines suitable for converting cellophane, but then, having done that, not only did it do nothing to make them available for other materials, but it did not concentrate those machines under its control.
7754 It encouraged the purchase of the machines by converters, whether they were regular converters or whether they were promotional converters. It encouraged the purchase of the machines by the direct users, who were always free to not only run other materials on their machines, but to run Sylvania's cellophane on the machines. And the whole development was designed to make it easier to sell cellophane, not to control, through the control of the machines, the outlets for cellophane distribution in order to channel the business to DuPont; just as they never integrated by doing the converting themselves, so even one step beyond in this control of outlet aspect, nothing was done which was designed or had the result or effect of inhibiting the competitors. The whole thrust is in the direction of increasing DuPont's sales.

Now, there are numerous materials offered about this issue on the Government's case. I refer your Honor particularly to four exhibits, Government's Exhibits 431, 455, 435, and 480. Those exhibits show that the development of this machinery was in an effort to lower wrapping costs, to put cellophane in a position where it could compete with other materials in the markets, and to encourage the use of cellophane by specific types of customers.

Now, here in this group of documents, they go from 410 to
7755 435, you see us working with the machinery people, you see us going to the users and referring them to the places where they can get the proper type of machine. You see the users buying the machines, and going to the salesmen and using our development of the machines as a means and method of promoting the sale of cellophane.

It is interesting, your Honor, in this connection, that we didn't seek to sell only to converters. The Government would have it, I suppose, that on their theory we would seek to do this to a particular class of converter, the promotional converter. Not only

did we sell to all types of converters, but we sold to all the users, who worked on the converting of material, or direct competitors, the converters, and it made no difference to us where we could place a machine, as long as we could encourage business.

And if we are talking about all these impulse waves that are over here on the Government's chart, you will see in this a very concise illustration of why we say that the market was the market we say it was and how antithetical to that the Government's position is when you look at the realities.

There was no centralizing of this in the converters, and no centralizing in the proferred converters or any kind of converters. And you will see that we went into the user's plant and worked with his men in showing him how he could get a machine
7756 which would enable him to use cellophane on his package.

And we went to the machinery people and brought about the development of that type of machinery.

There is a trade report in 413 that shows an example of that selling, trade bulletins at 414, to our men telling them about the machines, and the other documents are of the same character. We did that whether the customer was a DuPont customer or a Sylvania customer, and made no effort to stop them from using the machine on Sylvania film.

We were out selling the product, not cornering outlets.

There are examples of work with the A & P in 419. The exhibit shows on its face that Sylvania was one of the suppliers whose work was being done with machinery there, and other examples of the same kind with other large accounts, as well as smaller accounts; quite a series of the work that was done with the A & P which will tie back in with some of the earlier Government exhibits, suggesting that the reason that A & P shifted from one to the other was discounts; whereas, as we have already shown, they got superior service from us.

I am not going to read all of these documents, your Honor.
7757 They carry the story chronologically through up until, I believe, the latest one is in 1948, Exhibit 435.

Now, the next one, the next group of documents in this series relates to the converters. You will see that we have some policy documents in 437 to 443, and then some specific documents relating to work with converters and work with regular converters.

Now, the Government's theory on this phase of the case, as I understand it, is that DuPont got all the best converters, all the biggest converters; that it gave them special service and special benefits that were not given to other converters, and then channeled all the business to that particular group, and in that way a picture is sought to be drawn of control of outlets.

Now, we say first of all that there was no difference in our treatment between regular converters and other types of converters: that Sylvania had as many converters as it needed: that there were plenty of converters for it; that there were no special benefits given converters; that their interest was in selling cellophane, whether we sold it direct, or whether we sold it to converters.

We have here some very specific documents which categorically contradict the inference which the Government sought to
7758 draw on specific transactions relating to the converter issue.

In this general group at the beginning, however, I call attention first to 437. This brings on up to date GX-5046, which showed the converters, the DuPont converters, up to that date. You will recall that that exhibit showed that Sylvania had taken converters from DuPont; that many DuPont converters converted Sylvania's cellophane, and in some cases converted more cellophane for Sylvania than they did for DuPont.

Now, here we take that list of DuPont converters. You understand, this doesn't include any Sylvania converters. It includes only the ones that DuPont has, and shows as to this for the years 1945 and 1946 and 1947, the estimates that are made in the company's regular course of business, of the amount of cellophane that these DuPont converters are converting for Sylvania. This is, of course, all over and above the conversion that is being done by the Sylvania converters. And you will see frequent examples of converters who are doing a substantial business for Sylvania as well as some business for DuPont.

In some cases the Sylvania business is greater than the DuPont business. In some cases the DuPont business is greater.

You will see the gradual expansion of the group of con-
7759 verters which has taken place as shown in GX-5046, and which continues here in the same general trend, more converters coming in, a substantial number of converters doing business for both, entirely contrary to the Government's contention.

Now, I call attention to 438, which is the next exhibit in this group that relates generally to converter policy. This is dated 1928, your Honor. And I think this and the two or three that follow again completely explode the impulse wave theory which is charted over there on the blackboard, and which says, "Do not erase," but which should be erased, in the light of the evidence.

Here is Mr. Benz in 1928 sending out a bulletin to the salesmen about converted cellophane, and what is his attitude about it? It is one that what he wants to do is to sell cellophane, and he doesn't care whether the converter sells it or the direct salesmen sell it. The thing to do is to sell cellophane. And his whole thrust and interest is in terms of the ultimate user, in accordance with our own presentation with respect to that matter.

If you will look at the third, fourth and fifth and sixth paragraphs, in particular, you will see what Mr. Benz said to the salesmen here in 1928. And it is in complete support of our contention on this issue.

He says, "Naturally, our first presentation is the value of
7760 cellophane to our prospect in marketing his goods. Generally this includes the featuring of sheet cellophane, whether plain, transparent, colored, etc.

"As the proposition is developed, and you find converted or fabricated cellophane is desirable to recommend, or when the customer demands it, you are in a position to suggest the best source of supply. And, this should be freely done.

"In the final analysis, the customer should be satisfied, and if he feels the convenience of converted or fabricated cellophane compensates for the increased cost, be just as enthusiastic in your effort to get him started.

"Remember, a cellophane user should receive our full support, regardless of his source of supply."

We are out selling converted cellophane, your Honor, with our salesmen just as much as we are selling directly, ourselves, to the user, who himself desires to convert.

In 439, you have more of the same, and you are sending out to the salesmen actual examples and information about converted cellophane to assist them in selling.

Here is an assortment of converted cellophane items.
7761 And they say that these samples have been supplied by a variety of converters; and over on the next page, take a look at the next to the last paragraph on 857, "It has been and still remains our policy to serve the customer to the best advantage. If printed or converted cellophane is what he wants or needs, it is our business to sell him on these."

Could there be any clearer statement? And I am sure that when Mr. Benz wrote this in 1931 he could not have conceived the impulse wave chart on this blackboard in 1951, 20 years later.

The COURT. Mr. Clerk, at your first opportunity, if it will make Mr. Gesell happier, erase the blackboard.

Mr. GESELL. He can turn it around, your Honor. That will make me happier.

The COURT. Well, yours is on the other side.

Mr. GESELL. Now, you will see another one, your Honor, on 440. It is a later document, in 1936, called "Converter Relationships." I direct attention to the last paragraph on 859, again emphasizing that we want to sell it. It doesn't make any difference whether it is to a converter or a non-converter, the thing to do is get the business moving.

You will find in 441, the first two paragraphs, 1 and 2, on 860, contains other information on the same basis.

7762 And then look what they are saying here? Here Mr. Brown is saying to Mr. Hatt in 1941 that we have to increase the indirect sales, and that over 50 per cent of the converter business is in the hands of two people. And what is DuPont saying? "Fine, we have got it sewed up, we have got an outlet nicely controlled?"

No, Mr. Brown says, no, "Certainly our selfish aim should be to get a better distribution in both the promotional and other converter groups."

We want a broad converter market; we want to stimulate their sales.

And you will see in 441 over on Page 862 and 863 and 864, a further development of that policy set out in detail, as to what it is the DuPont salesmen are supposed to do.

Look at the bottom there, "It should be pointed out that the field work of our men with regard to converters is not a question of selling for the converters—who out-man us in total ten to one, but directional work which points up opportunities and leads, lays the ground work, and does the preliminary development."

And he says you cannot cite all the instances that we have had, and then he goes ahead and cites a very concrete and useful example, from our point of view, in this Nashua instance at

7763 the bottom, where DuPont salesmen promoted converter business. And then there is a historical review on Page 863, and he points out that these three people, Shellmar, Milprint and Dobeckmun, who your Honor will recall all came into this business before Sylvania established themselves, and that DuPont has worked with them in an effort to develop the business; that they are specialists, and that we are trying to encourage them in every way.

You will see the last paragraph, "Over a period of years, the Converter Section has attempted to encourage various desirable converters to more aggressive specialist promotion, but for lack of ability to see possibilities, inability to build the proper type of sales organization, limited technical skill or other reasons, certain converters have not made expected progress."

But our sales effort is designed to build up the converter, so that he can serve the end user: on whom we are calling and developing business.

There is more of it in the last three paragraphs on Page 864. Look what he says. "Certainly our interest should not be to impede the progress of our best customers—" talking about the converter customer that he has mentioned on the previous page— "But

to work continually to develop others in the field to do a similarly good job.

"This applies to converters now on our books as well as
7764 new converters whom we will select in the future with proper evaluation of their ability to build this type of operation.

"Our objective, as Mr. Yerkes states, is to get better distribution."

Now, that is all, your Honor, completely contrary to the Government's theory. Outlets aren't controlled. Efforts aren't being made to channel to a few. We compete with our converters. We encourage the development of their business also. We do not lock up machines. Our converters convert cellophane for Sylvania, and as we saw on this study, many other materials as well. All of that is contrary to the controlled outlet thesis of the Government.

You will see a statement of the position again as of 1943 in 442-A, the third paragraph. It is a very neat summary in this letter to Mr. Neumiller by one of the DuPont manager in that third paragraph, and shows what these documents illustrate.

As far as cost is concerned, if you will turn to 443, the Government concedes there is no price fixing of converter prices. Of course there isn't. But what is our emphasis? We want to get the cost of the converted cellophane down, not to hold it up. If we were in cahoots with competitors and having controlled outlets, monopolizing channels of distribution, we would be trying to keep their price up and our price up. And we are saying
7765 that we want our converters to get their prices down, that we ought to do everything we can to show them ways and means of reducing the price of converted cellophane.

You will see a detailed discussion of that with particular reference to the fourth paragraph, and the next to the last paragraph on 869, and the second full paragraph, the fourth and sixth full paragraphs on 870.

We think some of our converters have lower costs and their prices indicate we ought to do everything we can to inculcate the ideas in our converters that they must get the prices down. "As ammunition for us to use, I would like to have you make a rather thorough investigation with those of our converters who print wax bread wrappers, such as Nashua, Detroit Wax, and obtain from them their actual costs on their printing operation. We should also, through Mr. Russell build up factual information regarding cost of printing by our consuming customers," because there is a huge market here if these converters will only get their prices down and go after them.

That covers the group in respect to policy up to 443.

We then come to the development of converters, which goes from 444 to 454. And there we have tried, your Honor, again by a sampling of documents, to show the development of this aspect of the business.

7766 This first document is dated very early, November 20, 1924, Exhibit 444, and it simply shows that at the beginning there was just nothing to start with, there were no machines, no envelope bag manufacturers, even. There weren't any converters for cellophane.

You will notice he says that the sales have been handicapped with reference to wrapping machinery; "Found it impossible to interest manufacturers. Two firms now trying to make a machine."

"Also difficulty with printing and manufacturer of envelopes."

So that at the start there isn't anything. And then you see Mr. Yerkes comes in with big news at the bottom that a bag manufacturer in Connecticut has taken an actual order. And he says, "In printing," they are having trouble.

So that at the beginning of this business you do not have the machines, you do not have the converters at all. And then we trace out through a series here examples of the development and promotional work that was done in order to build up this converter aspect of the distribution.

You see in this next board minute, 1925, that we are working closely with certain concerns on machines trying to get satisfactorily operating machines.

And at the bottom, there has been no definite
7767 progress yet in regard to the printing of cellophane, but that we have a lot of printers working on the problem and we are trying to develop other people and get them interested in becoming converters.

And then over here in the next document, in 1925 a bulletin to salesmen, which is called, "Here is an important message." It says that the company has been searching for someone who will be a converter, and the second paragraph says, "During the past year or more, we have diligently searched for a concern who could manufacture cellophane bags or envelopes by machinery," and that comes as an important message, that they finally got somebody who will do it, and then they eventually have to say that the American Paper Goods Company, who is going to do it, unfortunately can only make the bags at this time of one size.

Now, here wasn't a situation with a lot of established outlets that could be gobbled up. Here is a situation where DuPont had to go out and by energetic efforts encourage people to become converters and promote their interest in this business. And it isn't, in the context of the thing, for the purpose of not competing

or keeping others out, it is all in terms of, we want to get into this packaging business, we want to get outlets. You will see over on 875 opportunities for various types of converter material being called to the salesmen's attention.

7768 And then on 447, another big announcement, 1925, here is the first printer, and he is able to handle some printing material, and they have been working with him.

7769 And then as to machines in 448, they have got a bag-making machine, finally, that will make one type of bag, and that is announced to the salesmen, and here in 1927—and you remember that Sylvania hadn't even gotten any stolen information from Europe at this time—you see the announcement of the start of mill printing in 449. This is one of the big concerns we were supposed to have gobbled up, and here we announce to the salesmen the beginning of Milwaukee Print's business.

"The above organization"—this is in 1927—"The above organization, in Milwaukee, have been playing around with 'Cellophane' for a couple of years, but have never really gotten to printing it until recently."

"This particular concern is one of the largest printers of glassine paper in the country—they specialize on that—although they do other types of printing. It is the glassine candy wrap that represents the bulk of their business."

And we announce that we have them interested in printing cellophane. There is the beginning of one of the three major outlets for converted distribution, and we certainly don't seem to be announcing to our salesmen that here is a big competitive development where we cornered somebody.

And there are other documents here along the same line—working with Dennison, 452, in the development of rolls; working with Dobeckmun in 1929, in 453, on the whole problem

7770 of cigar tools.

You will notice in 454, the bulletin to salesmen, on the promotion of cellophane bags:

"Many of such retailers are now using machine made, single-wall, one pound cellophane bags in place of glassine bags with great success.

"The result of this change from glassine to cellophane indicates a turn-over from two to six times more rapid on these products than when previously wrapped in glassine"—and we are in a better position to compete, and we tell the salesmen that.

These documents, your Honor, are not in the context of outlet control. These are as creative indications of sales development work done for the purpose of competing as research is in the other category of the business.

Now, coming to 455, we meet a series of documents that goes to 490. Your Honor will notice that that is captioned "Services to Regular Converters," and here we are concerned with a very specific issue tendered by the Government on the trial; and these documents are put in solely for the purpose of negativing the position taken by the Anti-Trust Division at page 3620 on the transcript, and that simply was that the degree of service and assistance we gave our promotional converters—they call this preferred group—was greater and different than the service we
7771 gave regular converters, the people who handled two sources of cellophane; and here we have a series of documents running from 455 over to 490 which completely negatives the Government's assertion. These are regular converters. These are people who are handling Sylvania business as well as ours.

In 455 we are working with a concern on metallic ink formulas; in 456, with another concern testing glue on M. S. A. T. bags. We are working with another in 457, showing him how to use machinery. It shows right on its face they are buying from Sylvania as well as us.

458, work with Cuneo conducting tests as to a brand of apple powder in bags.

We are helping with laminates in 460.

In 461 we have gone into Reynolds Metal and spent several weeks in their operations trying to show them the advantages of cellophane, how they can use rolls, how they can get rid of irregularities.

In 463 we have an indication that that concern is a regular converter, and we are taking them blueprints and we are working with them.

Reynolds Metal, on 464, we take blueprints as to a heat sealer.

Forbes Lithograph in 465, we are working with them on problems in converting in connection with the tension of films.

7772 No. 466, Union Bag again on sealers.

In 467 we are working on bag breaking problems.

468, chemical tests on various materials.

470, we are giving merchandising literature. You will remember they had a lot of that in their case.

Again in 471 and 472 we are giving a consumers survey on hosiery.

Sales literature in 473.

Consumer advertising in 474–475, 476, 477.

An article in 478.

Here is the post-war plant packaging manual in 479, which they told your Honor was given only to the promotional converters.

Here is other consumer advertising in 480.

And here, your Honor, is a concrete example in 483 of a reference of business. We are supposed, under this transcript, in 3632 and other places, to have referred business only to the promotional converter. Here we are referring business in 483. We are referring business in 484, in 485, in 486, and in 487, referring business to regular converters, not to promotional converters; and then we really run into a very interesting example, your Honor. It just shows how these misconceptions can arise. We were charged with referring personnel only to promotional converters, and a great point was made in the evidence of that, and work was
7773 done, emphasis was given to the Government exhibit showing that a Mr. Dorsey had been referred, and now we come along with two letters written at the same time showing that we were also—as you will see from 489—referring Mr. Dorsey to a nonpromotional converter.

Then there was a great point made about giving us a slitter, to one of these concerns, a slitter, and you will see that we did work with slitters on non-conversion, non-regular converters; so that we have here from these documents showing the identical kind of service to the regular converter—references of business, references of personnel, working with advertising literature, all of the things that so much are made of on the Government's case, and if you tie through these documents and the earlier documents showing the status of these converters, you will see that in all of these cases we are dealing with people who were regular converters.

And then, your Honor, we come here to the final section of this which is concerned with—next to the last section—relations with jobbers and their re-sellers. I want to call particular attention to Exhibit 491. You will recall that the Government, through Mr. Roache, offered an incident as to the Houston Paper Bag Company, in support of his contention that Du Pont fixed jobber prices. That related to GX-5318 and 5319, which were discussed at some length, and I protested at that time the selection of the Gov-
7774 ernment's exhibits because they had in their exhibits, but weren't offering, 491.

Well, now, your Honor, 491 is dated 11/20/39, and it is the document that led to the entire incident which Mr. Roache so emphasized to the Court and from which he suggested that Houston Paper Company was eliminated because they were price cutters; and you will see under 8 that the salesman had had a long discussion with Houston and said that since they were handling other people's film and that was not satisfactory, we couldn't keep him on, and the inference that the Government seeks to draw, that they were taken off the list of converters because they were price cutters and because in some later documents, in writing about someone to whom this was referred, it mentioned price cutting, is completely

exploded by looking at the document that generated the action, and you will see that the action was taken in 492, saying that the man should not remain on the list but should be omitted because they are now handling competitive film. So that explodes that canard—the single example of jobber price fixing which was so built up by this careful but limited selection of exhibits, in spite of the fact that that one was in their book and wasn't offered.

And then we have one or two other documents pertaining to that issue which further button up the question beyond any dispute.

7775 In 493 we write to one of these people and say, "You know from experience that we exercise no jurisdiction whatsoever over your distribution of cellophane and the same applies to other agents and jobbers."

There is an A on that one that is somewhat illegible.

And then there is a document in 495 in which you will see that as far as Zellerbach is concerned and Zellerbach's customers, their prices are all their own and not ours and not our concern.

And then finally, your Honor, a significant document here, this group of documents beginning in 496. The Government, you will recall, used as their other example of jobber price fixing the fact that we were out getting information as to the jobber prices, and here in this group of exhibits, 496 shows why we were looking for jobber prices. It had absolutely nothing to do with price fixing, but it resulted from a study made in 1943, which you will see in 496 and the subsequent exhibits, looking toward the best method of changing our distribution methods, and we needed to have the jobber prices in order to study the market for the determination of a post-war policy.

On page 934 you will see that after analyzing the situation and saying that the job breaks down into two parts, market research in the establishment of the policy and a line of merchandise, and selling the new jobber proposition, it says, "The main job

7776 now is to intensively study the jobber and/or paper dealer markets for Cellophane and determine a post-war policy and a post-war program of operation, sufficiently confirmed, at least by discussion, to convince ourselves we are properly prepared to go into action when the green light goes up."

The initial steps should be a field survey of the retail trade, of jobbers of all types.

And then what happens in 497? There is an announcement that Mr. Wallace has been assigned to make the study, and then we go out and we get together the price information in 498, and if there is any question that it was done for price fixing, you get to 499 and you see we didn't have any idea what the prices were, and that is why we had to get them; and because the Government decides it

will select a single document or two showing we were inquiring about jobber prices, and ignoring the background of why that was done, they ask your Honor to infer jobber price fixing, when it is patently obvious from this that this was a survey of the jobber markets, that we knew nothing about their prices, we had no interest in controlling them, and we were out trying to collect data.

Finally in that book, your Honor, we have simply put here for ready reference the new form of standard label agreement in 502, and which is discussed in 503, which is not essentially different from the earlier form.

The COURT. Recess until 2:15.

(Recess taken until 2:15 o'clock, the same day.)

7777 2:15 O'CLOCK, P. M., THE SAME DAY.

Present: As before noted.

Mr. ROACHE. Your Honor, I would like to bring into focus now the defendant's documentary evidence as it shapes up to the Government's charge, and its proof. The Government has charged that the marketing outlets in both the indirect and direct sales were monopolized and controlled by DuPont by means of unfair competitive practices. This the Government has shown by proof of, 1, the Defendant's deliberate attempt to garner all important converter sales to itself by various practices, many being illegal, this being accomplished in the first instance by the discriminatory quantity discounts, and then in 1939 by means of the arbitrary converter changes and discriminations made to keep to itself this important trade; then by proof of aid given to the marshalling of these converter sales by restrictive understandings and agreements which the buyers were compelled to comply with due to lack of adequate alternative supply; and then by proof of maintenance and intent to monopolize, further manifested by various unfair distribution practices, such as resale price stabilization, allocation of geographic areas for resale, and restrictions on the resellers manufacturing and selling activities, some of which were unlawful in themselves and discriminatory practices to direct

7778 purchasers of cellophane and caps and bands, which channeled direct purchasers to DuPont. Now, the factual outline of the Defendant's position states on Page 10 under IV, subhead B, "Outlets were not controlled," and then in its documentary proof, divided into seven sections, Defendant attempts to prove this general statement of denial by showing under the first section, "Distribution in General," by four documents dated after the filing of the complaint, two of which gives their present discount policy, sales policy, relative to discounts and prices.

Another 15-page document shows what type of cellophane is best suited for particular products.

And the fourth document shows sales by trade classifications for the years 1949 and for 1948.

Then the next section entitled "Promotion of Bag Making and Printing," consists of 26 documents, 17 of which are trade reports. The remaining nine being letters from machine manufacturing companies or inter-office memos telling of recent developments in a machine, and bulletins to salesmen advising of new developments.

Then the converter policy section contains eight documents, and gives a chronology of converters since 1944 to 1947, inclusive. It has three bulletins to salesmen, an inter-office letter, which shows

7779 that they attempt to get converters to print cellophane paper; an answer to a letter written by Humitube Manufacturing Company, and the letter by Humitube, of course, does not appear; and DX-441, which I will discuss in detail later.

Then a section called "Development of Converters." This contains 11 Defendant Exhibits, eight of which are bulletins to salesmen.

Now we come to the section containing the greatest amount of Defendant's Exhibits having a subheading under this general issue. It is called "Service to Regular Converters." It has 36 Defendant exhibits which, of course, consist of several trade reports. And these exhibits, for the great majority, show the Du-Pont Company straightening out a customer complaint on performance of cellophane.

I will also take this section up in detail later.

Then appears "Relations with Jobbers and Resellers." Four companies are discussed, and a jobber policy outlined.

Then the last section, "Standard Label Agreement," contains two documents, one stating the conditions covering the use of the label, and the second explains to the Regent Tube and Bag Company the conditions covering the use.

That is the type of evidence the Defendant has used to prove outlets were not controlled, as the Defendant's factual outline states on Page 10.

7780 It is the Government's opinion that this kind of evidence is completely lacking in probative value for points raised in the Defendant's outline.

I would like to take up a few of these Defendant's Exhibits to point out how lacking in proof they really are. I would like to point out some of the Defendant's exhibits that actually buttress the Plaintiff's contentions already made and proved.

Now, take the first section which is entitled, "Distribution in General," four documents, your Honor, all four dated subsequent to the filing of the complaint, four documents dated subsequent to the complaint, supposedly proving distribution in general, in general for the years 1948, 1949, and 1950, but what about from 1923.

to 1947?' What is the proof on their distribution in general there?

And turning to Defendant's Exhibit 409, the last one in that group of four, "Cellophane Sales by Trade Class"?

Now, the Government in its proof has shown that DuPont channeled by quantity discounts the direct purchases, and how the most important indirect sales outlets were monopolized, these indirect sales outlets being converters.

Now, this document continues to show that Defendant's concentration on the converters and the direct customers, the
7781 greatest total of their sales being to direct customers and converters, so it seems to show that this is still continuing.

The COURT. I did not get that last sentence.

(Thereupon, the record was read by the reporter.)

Mr. ROACHE. Now, in the next section, called "Defendant's promotion of bag making machinery and printing," in this section, your Honor, I counted ten documents out of 26 that might be considered as promotion on the part of DuPont, that is where DuPont may have put the idea into this person's head to get a bag-making machine. The others are evidence of machine companies writing to DuPont merely giving information about their machinery, and involving no action on the part of DuPont. These documents are 410, 415, and 417, and there is other evidence showing companies who are already sold on the idea of bag making, asking DuPont to recommend what they might consider the best machine, such as DX–430, 423, 424, and 428.

Now, let us look at a couple of the Defendant's Exhibits as examples of what DuPont calls promotion. Take 414, the third paragraph, "See below the list of representatives who will handle the Transwrap packaging machine."

This is a bulletin to the salesmen.

7782 "It will be profitable for you to cultivate the acquaintance of their representatives in your territory.

"Stokes and Smith Company have always operated in a rather conservative manner, and you should do a real selling job on their sales representatives. Undoubtedly they will appreciate any assistance you can offer as they are recommending only the use of cellophane cellulose film for use on the Transwrap packaging machine."

I wish your Honor to recall that at this time in 1937 DuPont was protecting its trademark "Cellophane." So when they refer to cellophane, they mean DuPont cellophane.

And it goes on to say, "Remember, this is a new direction of work—so do not expect too much of them at the start.

"Do your best to justify a continuation of this cooperation in your territory——".

Now, that sounds to me as if DuPont is telling its field men to do a selling job on Stokes and Smith and get them to recommend only DuPont film. That is not promotion of the bag-making machine and printing.

Then Defendant's Exhibit 413, this is also supposed to represent promotion on the part of DuPont. Now, this is a trade report in which one of the DuPont sales service engineers or salesmen called on Amsco Packaging Machinery Company, and this man reports "Miller have recently developed a band attachment which can be added to any of their present models for $195."

7783 And later on, "a new attachment will be available shortly to spot labels on the sheet prior to making the bag."

And on a little further, "Amsco have developed a rotary crimper which appears to overcome practically all the past weaknesses of this type of equipment."

And down further, "They also have developed a small foot pedal-operated crimper which will sell for $60."

And then, "Also change design of crimp dies on both machines to give radius on top and bottom of each tooth or rib."

That seems as if Amsco is doing all the developing here. Where has DuPont developed the use of the bag making machine?

Mr. GESELL. Your Honor, if I may interrupt, he read one sentence, and skipped one, and then read the next. If he read the middle one, he would have seen we made a suggestion for the improvement of the machine and for a change in his design.

And earlier he skipped the sentence that says, "The Simplex bag machine has been substantially improved in design, largely because of our efforts."

I agree with you that these documens, if you read parts that don't relate to what they are offered for, don't show what they were offered for.

7784 Mr. ROACHE. This section was entitled, "Promotion of bag-making machines," in other words, promotion means taking preliminary steps and being the one to put the idea across, even—and I will agree with Mr. Gesell that they probably did give this company help, but where did DuPont go out and make——

Mr. GESELL. Read Paragraph 2 and you will see the answer to that in this exhibit. Read Paragraph 2 and you will see the answer to that in this exhibit. Read Paragraph 2, which you also didn't read.

Mr. ROACHE. I found 10 exhibits in this, your Honor, for the 12 years covered by these exhibits, 1936 to 1948, where it appears DuPont may have put the idea across. And these statements appear in such reliable exhibits as trade reports, included among them being the A & P and American Stores, both companies al-

ready having been sold on the idea of bag making. DuPont is assisting them, but the idea was already adopted.

Now, we come to Defendant's Exhibit No. 441 under the converter policy section. And here is an exhibit where Mr. Gesell only read portions of the document. Here in Defendant's Exhibit No. 441 we find an exhibit, which appears to be helpful to the Government's case.

At Page 3669 of the transcript the Government has stated and proved the promotional converters received discriminatory assistance and were referred business over
7785 regular converters.

Now, take the last paragraph on Page 862. "Nashua. This organization for some years was a two-source of supply converter. In 1939, Nashua's last year on this basis, the converter sold approximately 350,000 pounds, including both DuPont and Sylvania. In 1940, the first year as a promotional converter, Nashua sold nearly 550,000 pounds. Hundreds of trade reports witness the fact field cooperation by our organization opened up many new directions of business, increased use with previously existing trade and in total was one of the principal contributors to this converter's progress."

Now, that is an example of aid after they became a promotional converter.

Going to the next page with regard to Mr. Yerkes' second question concerning a concentration of a large part of DuPont's business in the hands of the few, "Shellmar, Milprint and Dobeckmun, in particular, were among the first to establish themselves in the field and to recognize the advantages of 100 per cent cooperation with us."

That shows that they were promotional converters. That shows, it is clear, that there were advantages for exclusivity.

Then the rest of the page is an explanation that they are specialist, and the statement that DuPont has attempted to en-
7786 courage the more desirable converters, to more aggressive specialist promotion.

Then the second paragraph on Page 5 of the exhibit, "We do believe it proves the great advantage of the promotional type of operator—provides a pattern for others in the field," the pattern to tie up exclusively with DuPont is advantageous.

Mr. GESELL. It doesn't say that.

Mr. ROACHE. And continuing, the third paragraph, "Certainly our interest should not be to impede the progress of our best customers, but to work continually to develop others in the field to do a similarly good job."

There similarly to Dobeckmun, Milprint and Shellmar.

7787 These paragraphs show that Du Pont's interest was not

a more inclusive distribution, including to source and small converters, but to interest others, more desirable ones, in the promotional converter set-up, that is, the converter agreement whereby all converter purchases are made from Du Pont.

Now, on Defendant's Exhibit 437 Mr. Gesell made a point of the amount of Sylvania cellophane Du Pont's converters were using. I assume he meant promotional converters when he said Du Pont converters.

Mr. GESELL. It shows at the top they weren't.

Mr. ROACHE. That is what I want to bring out, but that isn't what you said. The document itself at the top says the promotional category was discontinued as of January 1, so they are no longer Du Pont converters.

Mr. GESELL. These are Du Pont converters. They convert the Du Pont material, and it shows in every case the quantity they convert.

Mr. ROACHE. Defendant's Exhibit 438, Mr. Gesell was showing the policy relative to converters being to freely recommend the best source of supply, that his salesmen recommend any converter, the one that is the best source of supply for this particular person. Did you notice that this document is dated 1928? Du Pont was the only one making cellophane in the United States.

7788 It didn't make any difference which converter got it. They were all selling Du Pont cellophane.

Defendant's Exhibit 439 the same way.

Now, the section called "Service to Regular Converters." I wish to state, your Honor that the plaintiff has never stated that regular converters did not receive any help from Du Pont. The Government stated that it was a matter of degree. Promotional converters not only received the same aid regular converters received, but also in addition received more valuable and much better aid than that given to a regular converter.

The defendant's own exhibits are a good example of the type of aid the regular converter received from Du Pont. That is the aid in ironing out difficulties with cellophane that the consumer has encountered in the use of the cellophane. Now, it seems to me that any concern would want the consumer to use his product, and if he had any trouble; he would certainly iron it out.

Now, the promotional converter got not only that assistance, but also the technical and other assistance, as is shown in Government's Exhibit 5047, at page 4658, where Du Pont said, "When a converter is exclusive we can and do work with him closely in the field," and Government Exhibit 5534, showing the Traver Corporation, a promotional converter, being invited to inspect Du Pont's Clinton plant and study its method of slitting and rewinding cellophane.

7789 Government Exhibits 5061, 5062, 5063, and 5064 show Du Pont assisted Milprint in obtaining a chemist and other technical men for Milprint's converter operations.

Government Exhibits 5091 and 5092 show Du Pont attempted to get a combination bread wrap for licensed Fabricon products.

Many other Government exhibits show Du Pont training Shellmar men and giving other valuable technical aid to promotional converters.

Now compare that assistance to what the regular converters received, as evidenced by the defendant's exhibits. In Defendant Exhibit 458 Du Pont advises Cuneo Press to suggest to its customer a double-walled bag of 300 M. S. T. 56 cellophane for packaging dehydrated applesauce. What kind of aid is that, telling the customer that is the best to use? We want you to use cellophane, so use the best.

Mr. GESELL. You omit the paragraph that says they conducted tests for two weeks with respect to that before making the recommendation.

Mr. ROACHE. That is right, sure, because the customer was having difficulties. Where does Du Pont sell the cellophane but to the customers? If they are not going to buy it, who else is going to buy it?

Defendant's Exhibits 460 to 462, inclusive, relate to a complaint received by Du Pont from the Reynolds Metal
7790 Company stating that the Lipton Tea Company wanted to return five million soup mix bags valued at $18,000 due to shrinkage of cellophane. That is quite a sizable account. Nobody would want to lose that. Is this special aid a real special aid to some converter? To me that is aid to the Lipton Tea Company to make sure Lipton's Tea keeps buying cellophane for their soup mix bags, so Du Pont conducted some tests to find out how to laminate cellophane to the Reynolds Metal Products so that Lipton's Tea would continue to buy cellophane.

Mr. GESELL. Wait a minute, Mr. Roache. He spent several weeks of operation in the converter's plant telling him how to laminate.

Mr. ROACHE. Yes. He was going to sell it to Lipton, wasn't he?

Now, Defendant's Exhibit 465: Du Pont writes to Forbes Lithograph advising them how to apply tension during re-winding of cellophane. Forbes had just returned 250 pounds of 300 M. S. T. 32 cellophane because of loose winding and wrinkled condition.

There are several more defendant's exhibits where Du Pont is aiding a customer because of poor results obtained with cellophane. Certainly this type of aid would be given by any company to any customer if it wants to sell its product.

Then there are several defendant exhibits, letters to regu-
7791 lar converters, wherein Du Pont encloses magazines, trade articles and copies of advertisements for their information. All this, as far as I can see, is public information, and I don't see the aid there.

Mr. GESELL. You stated on the record in your case that we didn't send that kind of information to regular converters, so we put in some documents to show that we did.

Mr. ROACHE. We did state it, and I just stated they got the same assistance as the regulars got, in addition, more valuable assistance.

I have pointed out, your Honor, the type of aid the regular converters received as compared to the valuable aid and confidential information promotional converters received.

Now we get to the Houston Paper incident, and I want to correct first a statement made when the defendant's exhibits were going on. Houston Paper was being referred to as a converter. Houston Paper is a jobber, and it is so stated in Defendant Exhibit 492. Mr. Gesell's statement here was that Houston was cut off because they were using competitive material. Now, I would just like to read two sentences from the Government Exhibit that immediately follows their last exhibit on this particular point. It is Government Exhibit 5318, from W. J. Harte to Lake. It is January 31, 1940, and I quote:

"I note you include Houston Paper Company, 1929 Franklin
Street, for Dealer Rolls. This firm handles competitive
7792 film in sheets and roll stock, they are price cutters and they are aggressively pushing competitive film. I am passing this on to you for your own information. I do not feel that they should be included as a preferred jobber and I do not see how I can justly cooperate with them."

The Government put that in, your Honor. We did not deny that they were cut off because they were using competitive material, but also because they were price cutters. We wanted to bring out that there were two reasons.

Mr. GESELL. May I interpose, your Honor, because this is one of these neat little questions of fact. If you resolve it at the time it is easier. Mr. Roache has overlooked 492, written day before his Government Exhibit 5317, which shows that at the time that 5317 was written, the people had already been taken off the list, and they had been taken off the list because they were handling competitive film, and that is the exhibit.

The COURT. In the exhibit which you made reference to, who was writing to whom?

Mr. GESELL. Mr. Harte was receiving a message from S. B. Ichla.

The COURT. How about yours, Mr. Roache?

Mr. ROACHE. Mr. Harte was writing this particular letter. He was writing to E. C. Lake, and this is the reason he gave for cutting them off.

The COURT. He was writing to whom?

7793 Mr. ROACHE. Mr. Lake.

Mr. GESELL. Mr. Harte had received a specific letter saying that their name was being taken off the list, and instructions to remove the name from the list the day before he wrote.

The COURT. You pick up from there, Mr. Roache. Then he wrote your letter the next day.

Mr. ROACHE. The next day Mr. Harte wrote a letter. He had not received this one as yet.

The COURT. I see.

Mr. GESELL. What do you mean, he hadn't received it?

Mr. ROACHE. I don't think so.

Mr. GESELL. Where is the evidence of that? It is dated the day before. It is 492. Where is the evidence that he hadn't received it?

Mr. ROACHE. I thought I was going along with you on that statement. You say he hadn't received it.

Mr. GESELL. I say he had.

Mr. ROACHE. All right, he had received it, and the reason he gave for taking them off, the reason he wanted to take them off, is because they were price cutters—one of the reasons. I am just trying to bring out Mr. Harte's reason for wanting to take them off is because they were price cutters. I don't care whether Mr.

7794 Ichla thought otherwise. Mr. Harte gave that as his reason.

The COURT. I haven't heard about Mr. Harte for about three or four months. Refresh my recollection. Who was he?

Mr. ROACHE. Mr. Harte, I believe, was in charge of the Chicago Office, of indirect sales at that time.

The COURT. Yes.

Mr. ROACHE. Now, under this same section, your Honor, which is entitled "Relations with Jobbers and Resellers," I want to state again that the Government never said that the defendant was out getting jobber prices when it made this jobber survey, but that they were getting the jobber information to revise their policy relative to jobbers, and the result of this survey was that jobbers were restricted to sales of cellophane under 500 pounds, that they could not sell any more cellophane in quantities of 500 pounds or more, that that, from that time on, would be a Du Pont direct sales.

Now, we have been telling the Court, showing the Court, the arbitrary way Du Pont decided what was a converter, a fabricator,

and what the jobber could do and what an agent could do. This defendant's exhibit shows the mental thinking of Du Pont, the arbitrary way it decided what markets the jobber could sell to, which resulted in only under 500 pound sales, and we note that although they discontinued all their agencies, supposedly—
7795 Catty, Brooks, Zellerbach, Morgan Ellis—they still kept Smith Lee and the National Manufacturing, who got a 7½% discount as agents. It shows the arbitrary way Du Pont was deciding from 1923 to 1947 the markets for its customers, the indirect sales customers—a method of distribution that would enable Du Pont to maintain its monopoly.

The last section, entitled "Standard Label Agreement" just has two exhibits, your Honor, one entitled "Conditions Covering Use of Standard Cellophane Label," and the other is a letter to Regent explaining the use. I suppose the purpose here is to show that any one could use the standard label, but that hasn't refuted the Government's contention or its proof on this point, your Honor. Government Exhibit 5378, a promotional converter contract, contained a provision allowing the use of the Du Pont standard label, and Government Exhibit 5420, the regular converter contract, did not contain this provision.

The COURT. Will you just say that last again.

Mr. ROACHE. Government Exhibit 5420, a regular converter contract did not contain that provision allowing the use of the label.

Mr. GESELL. It is our understanding that it did, your Honor. At the time you pointed out that it did.

Mr. ROACHE. It didn't in that one.

7796 Government's Exhibit 5047, dated April 28, 1941, states, at page 4569, "Use of the standard cellophane label is today confined to exclusive promotional converters and it is an asset of real value."

I think that is the clincher.

Mr. GESELL. Your Honor, while we are on this little point, their exhibit, Government Exhibit 5420, the third paragraph is the contract to the regular converters, and that states, "The converted products made from the material so purchased may be labeled and marketed as 'Du Pont Cellophane', in accordance with specific instructions furnished by manufacturer," and then those instructions are given which govern the use of the label.

The COURT. Now let me get the point. Do I understand it is your position, Mr. Roache, that only certain converters were permitted to use the Du Pont label?

Mr. ROACHE. That is right, sir. We showed that in our outline. We stated that Du Pont were able to get certain promotional converters and keep them because they gave them certain

benefits, and this was one of the several we listed, and this was one of the points Mr. Gesell has attempted to meet.

Mr. GESELL: At that time, your Honor, we called attention to the fact that the arrangement with the regular converter also provided for his using the label, and when you come to your
7797 notes on that particular exhibit, you will notice we called the specific instructions to the Court's attention.

Mr. ROACHE. Now, your Honor, in concluding this portion, just where has the defendant met the Government's charges and proof? On page 3549 of the transcript the Government, in proving marketing outlets were monopolized, which also reflects attempts to maintain and strengthen market control, the Government proved its charges by showing various practices, understandings, and agreements on the part of Du Pont, which the defendant had not met.

7798 On Page 3832 of the transcript, the Government charged and proved that DuPont sold cellophane and caps and bands to direct purchasers, and for a short period of time also to converters under a system of discriminatory quantity discounts, violative of the Robinson-Patman Act, which were designed to channel all principal direct sales to DuPont. We haven't heard a word about that.

Then on Page 3564 of the transcript, the Government charged and proved that converters were arbitrarily classified as to function by DuPont with the intent of increasing control over the indirect outlets. This has not been met.

On Page 3551 of the transcript, the Government charged that DuPont used a selectivity system in regard to its converters. This wasn't met.

The Government has charged that the indirect sales were made subject to restrictive understandings and agreements designed to maintain DuPont as the dominant source of supply in the industry. And we proved that by promotional converter agreements whereby these converters agreed to buy all their supply of cellophane from DuPont; the fabricator agreements, which were made on a yearly basis, whereby the companies agreed to buy their total yearly requirement from DuPont; agency agreements likewise, and agreements with agents in allocating territories. None of these have been met.

Then on Page 3746 of the transcript, the Government
7799 charged and proved other various unfair distribution practices, some of which are unlawful in themselves, as further evidence of DuPont's intent to maintain and perpetuate its monopoly and control.

These restrictions, I believe, were restrictions on converters which prevented the resale of cellophane except in converted form;

restrictions on fabricators which prevent the resale of cellophane except in a prefabricated form; restrictions on jobbers, which prevented them from converting or fabricating cellophane; restrictions on the caps and bands consumer, preventing the resale and limiting the use of the caps and bands.

None of these issues have been met by the Defendant in its documentary proof. These Defendant's Exhibits are completely lacking in proof.

Mr. GESELL: Your Honor, I quite conceive that those issues haven't been met, but you will notice how frequently Mr. Roache said the Government charged and the Defendant has not disproven. We have set about in our case to deal only with the proof, and gave answer only where there was evidence to meet. And the constant reiteration of these assertions by reading paragraphs from their trial brief, which is not an exhibit in evidence——

Mr. ROACHE. The transcript.

Mr. GESELL. Does not establish the charges.

* * * * *

7820 I invite your Honor's attention to Government Exhibit 515 and 516, which are both documents of the Sylvania Corporation not addressed to the Du Pont Company or not addressed to any specific addressee. One is of the Sylvania Industrial Corporation and the other is a letter of Birn & Wachenheim. There are some very serious matters involving these two documents, your Honor, and we would like to have witnesses to authenticate them.

Mr. GESELL. That objection is invalid at this time, your Honor. If he serves notice that he wants them authenticated, we will authenticate them. He has not given us notice that he wants them authenticated up to this time, and under the stipulation——

Mr. MINICUS. I didn't think any notice was necessary at this late date, your Honor; but Sylvania documents had to be authenticated. Is I recall, the Government did authenticate Sylvania documents.

Mr. GESELL. We notified you you must have a witness here first. You are now notifying me as we reach the document, and the stipulation says I must have reasonable notice.

Mr. MINICUS. Mr. Gesell had a list of all our objections weeks and months ago, your Honor.

Mr. GESELL. That is not the point. The point is
7821 whether we were notified we must authenticate them first.

The COURT. What are the numbers?

Mr. GESELL. 515 and 516.

The Government's own witness has already testified about this before.

Mr. MINICUS. I challenge that, your Honor.

Mr. GESELL. Mr. Hamburg.

Mr. MINICUS. I submit, your Honor, there is probably a great deal to this story, and to let it go in on these bare documents without the authentication of people to whom they are attributed to would really seriously prejudice the Government.

The COURT. What is your position, Mr. Gesell?

Mr. GESELL. The stipulation which appears at page 247 of the transcript which has governed this entire matter up to this moment provides that if either party desires an authenticating witness prior to the introduction or the proffer of the exhibit they are to give notice reasonably in advance.

The COURT. Read it to me.

Mr. GESELL. "No other objections as to authenticity are waived. However, to facilitate discussion of the documents at the trial the objecting party may consent to discussion of a document subject to later proof of authenticity. Where the objecting party
7822 desires proof of authenticity of a document prior to discussion of it, he will notify the other party as to which documents he will insist authenticity be established before discussion of it. Such notification may be made by proposed exhibit number, by category of document, or by other adequate identification. To the extent possible such notice will be given by the objecting party reasonably in advance of the time that the proffering party has indicated it will reach such exhibit in the presentation of its case"; and I reached the exhibit two minutes ago, and that is the reasonable notice he gives me now, and I say that violates the stipulation.

The COURT. What about it?

Mr. MINICUS. Your Honor, I submit that as far as this stipulation is concerned Mr. Gesell certainly had notice that we would ask for an authenticating witness on any document offered from Sylvania Corporation.

Mr. GESELL. I had no such notice, I state, your Honor.

Mr. MINICUS. In addition, this document was objected to on the grounds of authenticity and a written notice was sent to Mr. Gesell many months ago.

Mr. GESELL. There are thousands of documents that he is objecting to as to authenticity. The point is he has not raised this objection, your Honor, as to requiring prior authentication until we reached it.

Mr. MINICUS. We have no objection to Mr. Gesell
7823 discussing this document today, provided before it is admitted into evidence he does at some subsequent date bring on an authenticating witness.

Mr. GESELL. That is all I want.

The COURT. Proceed.

Mr. GESELL. That is all I want. That is what I said in the beginning.

Now, I understand we have taken care of all objections they have to our exhibits up to exhibit 504; is that correct, your Honor? Is that your understanding?

The COURT. Say that again?

Mr. GESELL. That we have disposed of all objections to documents up to Exhibit 504.

The COURT. Well, I hope I have disposed of them.

Mr. GESELL. I would like to have an understanding on the record.

The COURT. I have no knowledge that there is any question that I am reserving on any piece of documentary proof.

Mr. GESELL. We had an understanding the Government would make their objections at the end of each section. I now ask of the Government, if your Honor will permit, whether there are any pending objections to the exhibits up to No. 504?

The COURT. Let us have an answer.

Mr. MINICUS. Up to 504?

7824 The COURT. Yes.

Mr. MINICUS. Well, we completely discussed everything, and 504 my book indicates now Defendant's Exhibit 504, and I have just made two objections to exhibits subsequent to 504. We have certain objections pending with respect to these documents we discussed this morning that are after 504, but I think, your Honor, to the best of my knowledge you have ruled on everything up to 504.

Mr. GESELL. That is all I wanted to hear. Thank you.

Mr. MINICUS. I want that subject to the transcript. If the transcript does show something that is not in my recollection at the moment, something that may be pending, I don't think I should be asked at this point whether two or three days ago your Honor reserved decision on something and expect to be held to it later. My best recollection is that at the present time there is nothing pending, but I think my recollection is subject to check by the transcript. I don't want to be mouse-trapped on this thing.

Mr. GESELL. I don't think he could get into a mouse trap, your Honor. He would need the bigger type of trap.

Mr. MINICUS. That would probably apply to both of us.

Mr. GESELL. At 504 we commence a new section relating to foreign competition, and it covers the group of 504 to
7825 535. Here is a group of documents which contains specific instances of competition with the foreign producers. They are mostly designed to show the inferior quality and character of the foreign-made goods, and of course most of them are of an

early date, because once the tariff was in and the price was down they could not compete in this market anyhow; but they go to show even in the early days the difficulty which the foreigners had in selling a grade and quality of cellophane in this market which would compete with the Du Pont product.

The first on 504 is an early document in 1924 in which the Chemical Director reports that the German cellophane is weaker than the American cellophane and contains other deficiencies. I might point out that there is an error in that document, your Honor, disclosed by the Government exhibits as to the method of production. The Germans did not cast, though we thought so at that time, in the same manner as Du Pont. Government Exhibit 1455 shows that later information based on plant visit showed they were wheel casting rather than casting in the manner that Du Pont cast.

I am not going to read each of the documents in this group, but will call attention to a few by way of illustration.

The early documents talk about price cutting activities of the foreign concerns. I will call attention to 509, page 952, in which we are discussing the competitive situation there in considerable detail, and the setting up a counter fire against it. Mr. Benz is writing as Sales Manager.

7826

510 is one releating to Fenestra competition. We see over in 512 at page 957 reference to sales by various concerns into this market. These people, of course, were all supposed to be kept out, your Honor will appreciate, by an arrangement which the Government said existed. The import of competitive goods continued at a rising height late in December and there is an analysis of the various factors as to the competitive materials.

Then by 1929 in 514A we have comparison between Du Pont, Fenestra, and Transparit and two other types where it is stated that there has been an increase in the quality of the Du Pont film in the past year which has now come to a point where the Du Pont film is distinctly superior in serviceability and toughness to the other types, and a series of tests of various kinds comparing the film. You will notice that is by 1929. Then come these documents showing the very simple and obvious fact that Sylvania took over the Birn & Wachenheim agency in the period before they were able to do business by their own manufacture, a point which Mr. Hamburg covered in his testimony; and then we have in 517 and particularly 518, which is the determination and careful authoritative statement from the Department of Commerce as to precisely what tariff rates apply and when they went into effect, and that I think will be the basic exhibit to which we have reference on tariff matters to the extent they are pertinent.

7827

Then we see tests in 1931 comparing our film with the German film. The different properties are tested and Du Pont cellophane is considerably superior. This document refers to the German film and there is an analysis again of the usual tests and the conclusion of the tests is that Du Pont cellophane is superior to German film in every respect. That is as early as 1931.

7828 Some information of foreign prices is given in 520 from which one can compute by adding to those prices the duties involved, what the price picture is.

In 521 there is some more discussion of the relative properties as between DuPont and Plain Transparit, in which it states that the protective value of the coated Transparit is very poor, being only about one-third as good as that of Sylvania moisture-proof film, and about one-fiftieth as good as DuPont moisture-proof cellophane.

And then comes a series relating to the Japanese film.

In 522 is the first of those, which starts in 1933, pointing out that that film contains more glycerol; it compares favorably in strength characteristics, but that the moisture-proofness is very low, not being any better than DuPont's plain cellophane.

Quotations of the Japanese Company at that time for various quantities are shown in 523 to Zellerbach.

The COURT. What are those dollar figures? What do they represent on DX-523?

Mr. GESELL. The first one is C. I. F. Portland, $9, versus the cellophane price of $13.95. That's dollars a hundredweight, I believe, your Honor.

The COURT. I have alongside of that $9 figure——

Mr. GESELL. 90 times 100. It must be 90 a pound times
7829 100 pounds. I think those are prices per hundredweight.

You see the cellophane prices being computed that high are obviously for a substantial quantity, too, because we know the pound price was well below that at that time.

They are quoting prices, you will notice, substantially below the DuPont Cellophane price in 1934. And you will see from the other documents that the quality is at least correspondingly worse.

There is an analysis at the same time of the permeability factors as between the two types of film.

It says the competitive M. S. T. is of very poor heat sealing quality as compared with our M. S. T. Both types of film that we have analyzed of the Japanese are of extremely poor moisture-proofness.

There is more of that in 525, that the film is poor in moisture-proof quality, and has poor slip and a strong odor. "The sample was also poorly cut and had frayed edges."

Then you will notice in trade reports, 526—and this is 1935, right at this time—competitive comments, in which it says, after calling on the Luce Candy Company, this salesman reports that the Japanese competition has been eliminated, and despite low price, their material was so poor in quality that it cost them more than cellophane prices to use it.

7830 And later on down you see that he is using, and as you do at the top, he is using Sylvania film.

Another document relating to Japanese film is the following one, 527. They find that the material is too light and weak for satisfactory working of mandril bags, hard to glue, and much more difficult to handle in shaping the bags, much stiffer than cellophane, has a very permanent grain that affects the transparency of the packages. These are noodle packages.

And another indication of the same thing is in 528. There the trade report shows that in this concern they are also having trouble with Japanese film.

Down in the last paragraph on Page 980, "Very inferior grade of material and was breaking very readily."

Not considered using Japanese sheeting again, and promises all the future business to DuPont.

There is a report of the Japanese film position in the foreign markets, which also shows its very poor quality in No. 530.

In 1936 there is another document from Mr. Hatt again on Japanese film.

Another trade report showing the Japanese film was inferior to cellophane.

Another trade report, Japanese film was unsatisfactory for box goods, and so forth.

7831 There are some A numbers on that, your Honor, which make it more legible.

534 is a comment with respect to English film, mentioning its inferior quality.

Now, the main point of these documents is simply to show that film of various foreign origin was coming into the market. It was having some competitive effect, particularly in the early days, but was inferior in quality. And Japanese film, as the import statistics show, in fact all import film, has gradually disappeared with the increasing of the tariff and lowering of the DuPont price.

Mr. MINICUS. It is my understanding, your Honor, as a result of the discourse at the opening that Mr. Gesell's statements addressed to this so-called foreign competition, that Defendant's Exhibits 515 and 516 will not be admitted into evidence until there is a witness to authenticate them, and if I should be queried a few weeks from now about whether there are any outstanding

objections, if these two happen to slip my mind, I hope I can have them made at that time.

In addition to that, we do have three further objections to the documents in this section. The Plaintiff is trying to keep its objections down to a minimum, but these are so flagrantly inadmissible on the grounds of irrelevancy and immateriality, that we think for the purposes of clarity of the record they
7832 should be brought forth. They are all on the same grounds, your Honor.

I invite your attention first, your Honor, to Defendant's Exhibit 524, a letter from Mr. Snyder to Mr. Andrews, dated December 5, 1934, and we see that the subject is Sidac film. The first sentence or two says, "We have examined the samples of Sidac plain 300, Isol 300 and Isol Fuego 300."

Now, I had never heard of any such films as the latter two in the American market. And the next sentence clears it up.

"You state that these sheetings are competitive to cellophane in Argentine."

Well, I assure your Honor that the Government is having enough work proving a case of no competition in the United States, and we do not want to extend this case to the competitive status of various films in the Argentine.

Therefore, we believe that that exhibit is immaterial to the case as it now stands.

The same objection is stated with respect to Defendant's Exhibit 530. In Defendant's Exhibit 530, we even have the heading "Rio de Janiero, Brazil," and the cellophane, which is purchased principally from the United States, and then it shows the various films that are competing in Brazil.

7833 We had a great deal of doubt and question in our minds as we were working this section over about the relevancy of any part of it, but when we got into Brazil we were in complete confusion.

Then Defendant's Exhibit 534, which is from a Senor Rafael Oriol to E. I. DuPont de Nemours and Company, "Dear Mr. Andrews," and there he is responding to some request about English film in Cuba. And we fail to see the materiality of any English film in Cuba.

Now, these are all films and film situations that are occurring far beyond the confines of the United States. I could see in no way how they could affect this monopoly of cellophane film that has existed for so long in the United States.

Therefore, we request at this time that those three exhibits be stricken.

Mr. GESELL. Our view of them, your Honor, is that they show the inferior quality of these films, and in showing the inferior

quality of these foreign-made films they are of some probative value on the issue of the ability of those films to compete in any market, including the United States.

Mr. MINICUS. There is no showing, your Honor, that these films, this Isol Fuego, or even the Du Pont film that is being sold in South America, is the same film that is being sold in this country.

7834 I honestly do not know what Isol Fuego is, or who makes it. We know that DuPont charged a different price for its film in export. They might have been sending a different film. I certainly think any tests on any films taken out of the South American market are completely irrelevant to the films being sold in this market; no proof even that this British film found in Havana, Cuba, was ever sold in the United States.

The COURT. Will you give me the numbers of those exhibits again?

Mr. MINICUS. Those, your Honor, are Defendant's Exhibits No. 524, 530, and 534.

The COURT. Do you want to finish your remarks tomorrow morning?

Mr. MINICUS. Thank you very much, sir.

The COURT. We will adjourn Court until tomorrow morning at 10:30.

(Whereupon, at this point the trial was adjourned to Friday, November 2, 1951, at 10:30 o'clock, a. m.)

7835 FRIDAY NOVEMBER 2, 1951, 10:30 O'CLOCK, A. M.

Present: As before noted.

Mr. MINICUS. At the close of yesterday's session, Mr. Gesell had completed his remarks addressed to the portion of the index indicated as V-A "Competition in the United States with Other Cellophane Producers, Foreign."

Now, as I understood the purport of the remarks of the defense counsel, they were directed toward showing the existence in the market of the United States for cellophane of imported material.

Mr. GESELL. No. Let us get clear the purpose of the offer, your Honor. The whole purpose is directed to the Government's charge as to effect. In the complaint they claim that agreements we made had the effect of excluding imports. We contend that there were three reasons why imports didn't take place:

One, the tariff.

Two, the patents.

And, three, the poor quality of the foreign goods.

This is simply addressed to the issue of effect, and to show that the foreign goods was not of a quality which could compete in this market.

Mr. MINICUS. In that event, I would say that the
7836 material is under the wrong heading. The heading most definitely says, "Competition in the United States with other cellophane producers."

Now, we think that the nature of this subject matter and its scope is best presented in Government's Exhibit No. 560, which your Honor will recall to be the chart designated as a pie chart wherein is shown Du Pont's participations in this market, and Sylvania's participations, and then a thin line running down showing the imports.

Now, this chart brings to mind at that time a rather frustrating experience—in retrospect, I suppose, it is rather amusing.

Mr. Cook, as a witness, presented this chart. And after his preparation of it, he came to me and said, "Mr. Minicus, I do not want to put this chart in evidence."

And I said, "Why not?"

He said, "Well, I can't get a pencil with a fine enough point on it to designate that line. Anything that I run down there to show the imports would be too thick, and I am afraid I would be misrepresenting on the witness stand."

And it really took quite a bit of time before Mr. Cook convinced
him that this chart was a reasonably accurate portrayal of
7837 the amount of imports that came into this country.

The COURT. With your ability you should have been able to persuade him.

Mr. MINICUS. I thought I better let the witness have his own way about it, your Honor.

However, I guess economists are like that. Now, lawyers are entirely different. Mr. Gesell would take this hair line and inject life blood into it so that it became a pulsating, expanding type of vital competition.

Mr. GESELL. I am surprised that it is as thick as it is, considering the poor quality of the goods.

Mr. MINICUS. I guess it was a poor quality pencil we were using. We couldn't get a very thin line on it.

At any rate, the first few documents in the defense's submittal here purport to exemplify importations of cellophane during the period of 1924 through 1929, coming from Germany and Belgium. The Government does not take issue with the defendant on this point. In fact, we maintain strenuously that up to 1929, very significant importations of European cellophane were being sold in the United States by importers.

Now, therein, the record will show three principal importers of this product, Birn & Wachenheim was one, Henley was another, Catty a third; then there were some others. Uhler was an

importer of cellophane, and few very minor ones. All of
7838 these constituted extremely small business concerns which were apparently making a fairly comfortable income for their cellophane operations.

However, the Government's evidence also makes it very clear that in or about 1929, these three importers and all of the others were eliminated from the field. They ceased to exist as factors, as selling factors, in this cellophane market.

We maintain, and our evidence, I believe, supports us, that they were driven out by the aggressive tactics of the defendant corporation, which at that time was vigorously manifesting its intent to monopolize this industry.

The Government's documents show these tactics as they were employed in price reductions, in tariff activites, aggressive merchandising, and the intermediation of the European cartel.

7839 Now, whether these tactics were violative of the law, although the Government contends most definitely they were, that is not vital. They were performed with the intent of eliminating these competitors, the importers, and they achieved that objective.

Birn & Wachenheim's business became so unprofitable that it sold out to Sylvania. Henley left the field entirely. Catty we don't hear of after 1929, but it is quite significant that Du Pont's most important distributor during the thirties and forties was an organization called Catty. The same applies to Uhler.

At any rate, with the elimination of these importers, there was the end of all significant imports of cellophane into the markets of the United States.

Now, subsequent to 1929 and continuing on to the present time, the only source of imports of any moment at all to enter our domestic markets were those emanating from Japan. Japan did send in some cellophane to our markets. This certainly establishes one thing, that the wall around our borders, as far as Government action was concerned, was not impenetrable. Cellophane could get in, and it was getting in. Our exhibits and our charts show that in the thirties, prior to the advent of World War II, reasonably significant amounts of Japan's cellophane were being sold in our markets.

Mr. GESELL. What exhibit is that?

7840 Mr. MINICUS. That is 182 and 182A, sir.

Mr. GESELL. Thank you.

The COURT. GX?

Mr. MINICUS. Government Exhibits.

Now, the defendant's exhibits that were presented in Court yesterday are designed to show that this material was inferior,

according to certain tests performed by the defendant corporation, but the documents also show that the Japanese material was considerably cheaper, even in our markets, and undoubtedly had some appeal to a small group of price buyers. Nevertheless, in the total picture of the cellophane market, the amount of this material to enter the United States from any foreign source was less than 1/10 of 1% of the total supply available to buyers in the markets of the United States.

Now, the Government's evidence concerning imports and importers was designed to illustrate two facts: First, that after the importers were driven from the field, cellophane imports were not sufficient to in any way influence the supply of cellophane available in our markets; secondly, that virtually no imports entered the markets of the United States from cellophane-producing countries where the producers in those countries were involved in the world-wide cellophane cartel which had as its focal point La Cellophane. The defendant's evidence on this matter has
7841 not only failed to refute the Government's proof but has very significantly dodged the issue.

Now, aside from the point of imported cellophane, several other matters substantiating proof in the Government's case appear in these documents of the defendants. Now, counsel for the defendant has testified on several occasions that the processes which the defendant acquired from La Cellophane for the manufacture of this product cellophane were secret. There has been no proof of that point to date. However, it is significant in this regard, that the documents in this section as offered yesterday by the defendant show that as early as 1924 a corporation in Germany, probably Wolff & Company, was not only manufacturing cellophane in Germany, but this German cellophane was being sold in the United States, and again an inference is very easily drawn from the documents that these importations were coming into the United States before Japan ever manufactured a pound of the material. Furthermore, the tests made by the Du Pont Company itself, as expressed in these documents, reveal that the product compared very favorably with Du Pont's own.

Now, as to prices: Defendant's Exhibit 507 contains the pertinent statement that it was Du Pont's policy to maintain, and I quote, "A price reduction policy based on an anticipated increased business and not on past business or competition."

Now, isn't that exactly what the Government has been
7842 saying about the defendant's power to control the price of cellophane, and here it is in their own documents. This thing is so big that they can't seem to get out of the way of it. What manufacturing organization short of a monopoly can accurately forecast the market years in advance and then ascertain

precisely its own share of the forecasted market? I suppose on this 76–24 formula, and without consideration for existing business conditions and competitive inroads, and yet their own document said that in fixing that price they don't have to consider past business or competition.

Now, finally, with regard to Du Pont's tariff activities—and again I stress that this tariff matter is in the Government's case for only one reason—Du Pont brought a suit against Birn & Wachenheim, and that suit certainly manifests its intent with regard to the tariff, and the results were to so decrease the business of all the importers, that along with the other practices to which they had been exposed through the years of joint operation with the Du Pont Company, they withdrew from the field. All of them did; not one survived.

Now, with regard to those tariff activities, the Government's position finds additional support in Defendant's Exhibit 509. It is there admitted that it was their efforts which resulted in the increase in the tariff, and that these efforts were motivated by the

7843 desire to drive the only existing alternative sources of supply from the marketplace, and that these efforts ultimately succeeded.

Thank you, sir.

The COURT. In order that the record may reflect that I have no undecided rulings, I am admitting Defendant's Exhibits 524, 530, and 534 over objection.

Mr. GESELL. I understand, then, that the whole group of 504 to 535 is now in evidence. The transcript was a little vague about that yesterday when I offered them.

The COURT. But I thought only 524, 530, and 534 were subject to objection.

Mr. GESELL. That is right, your Honor. That is my understanding.

(Defendant's Exhibits 504 to 535 were received in evidence.)

Mr. GESELL. Before I go on to the domestic section, I think perhaps we had better try to deal with some of these matters extraneous to this section which are being re-argued here. The first question is, where is the proof of secret information? Well, the proof of secret information is not in this heading. It comes under headings to follow, and we are going to present the Court with the actual documents containing the blueprints, the man who got it, what he had to do to get it, and how he used it, so there isn't any question about the proof of the secret information.

7844 Next on the question of tariff and the question of our reduction in prices making it more difficult for people to import, there has never been any doubt that DuPont took proper steps to have the Parfak classified cellophane in accordance with

the law, and that the rise in tariff which resulted, and the reductions in price made it more difficult for the importers to compete. But that's competition.

And as for the Japanese, your Honor, you will notice that no statement was forthcoming from the Government of why it was that the Japanese exports dried up, and dried up, and gradually disappeared, when there is absolutely no proof and no charge even that DuPont had anything to do with the Japanese, cartel-wise or otherwise.

And the reason it dried up and disappeared was that they couldn't get the quality competition at the price they were using to get over the tariff wall.

Now, your Honor, we want to come to B. "Competition in the United States with Other Cellophane Producers, Domestic," which is broken down into the three subheadings there, and contains the exhibits 536 to 591.

I mention again that this section is concerned with competition with Sylvania. It is not concerned with competition with Olin, which is classified elsewhere, in Volume VII.

Now, we consider this section an important section in the case. I think it has a significance beyond that indicated by the heading.

7845 We will show by this evidence, and other evidence that is already in the case—and I emphasize in this and other sections, your Honor, that much of the material that we rely on is in the Plaintiff's evidence.—that there was vigorous competition, as to price, as to quality, as to service, as to salesmanship, and as to any other form of competition that you can mention, between Du Pont and Sylvania in the markets throughout this period.

That competition was competition of a kind and character which negatives a whole host of allegations which are found here at various points in the Government's papers.

Take the most direct and simple question, is the question of price. There is a great deal of material coming in this section relating to price.

29 of the complaint contains this statement:

"Prices charged by Sylvania, the sole alternative source of cellophane, have followed rigidly the line of prices established by Du Pont. Price competition has been and is non-existent in this industry."

Now, we have already exploded the myth of some kind of an agreement about prices through the Government's own witnesses, and we are coming now to show you that in the market place the theoretical case that the Government built upon the identity of price schedules disappears, and we see vigorous price competition in this market.

In addition, consider the importance of this general
7846 competitive question to a host of issues here in the case.

Here we are supposed to have conspired with Sylvania. We are supposed to have had a duopoly which jointly went forward to suppress others.

We are charged with restraining competition at the distribution level of the business in Paragraph 22 (e) of the complaint.

We are charged with having reduced the entire technology of the business to our control in Paragraph 28.

And yet we are going to show in areas Sylvania had the technology and took the business because of it.

It is charged in Paragraph 30 of the complaint that purchasers had been dependent upon Du Pont for supplies, and we are going to show that isn't the case, big accounts and little accounts.

We are charged in Paragraph 32 that Du Pont had a policy to suppress competition, and accomplished it.

We are going to simply see the competition, but no evidence of suppression or predatory practice against it.

The Government contends that in markets dominated by a few sellers, to use their words, their economic power will be viewed collectively. Theory, theory, theory.

Down here in the market we see no collective economic power to be viewed as between Du Pont and Sylvania. But we see
7847 the very thing the Government asserts isn't present here, and that is competition, of a vigorous kind, the exact opposite of the monopoly contention.

We are charged in 177 of this theoretical United States' brief that DuPont has coerced and suppressed Sylvania.

Well, let us look in the market places and see whether they were coerced and suppressed.

We are charged in 179 that Sylvania's operations were beset by suppressive tactics.

Well, what were the tactics? What happened in the market? What was going on?

That Du Pont exercised, they charge in 189, control in a manner designed to stifle competition.

Now, we want to take all of these resonant theoretical phrases and test them against concrete factual proof as to what were the competitive conditions in the market, what kind of tactics was DuPont using? Was Sylvania able to compete? And from that we will learn not only that there was no combination or arrangement between these two concerns, but we will also see that Du Pont did not have and did not seek to exercise in confronting this competition monopolistic predatory practices and powers.

So, the significance of this to the case is substantial.

Now, I have heard just about all I want to hear in this case from the Government table where a group or a
7848 particular attorney gets up and says, "Your Honor, we will note there are 22½ exhibits, 16 of them are trade reports, one is a mere sales bulletin, three of them come from sources that can't be identified," calling the roll by number of exhibits.

Now, our proof has been supplementing proof in this case, as we stated in the first paragraph of our trial brief. And let us just see for a moment, we have got plenty of time here today, we are running well ahead of schedule on the documents, let us just see what is in the record on this issue of competition already, before we turn to these documents.

I can assure your Honor I am not going to read all of it. We have collected it from the record, well over 150 citations of concrete instances of competition with Sylvania, taking business from them, they taking business from us, of price competition, of quality competition, and of the vigorous inter-play of all of the competitive forces in the market.

Let us see some of them. In GX-435, in 1930, it is reported that Du Pont gained from Sylvania, 32 accounts, and lost to Sylvania 10 accounts.

In 436, in 1931, it is reported that Sylvania gained a small share of two important Du Pont accounts and part or all of the
7849 business of 35 accounts who formerly bought from Du Pont, and that of those 35 accounts nine purchased exclusively from Sylvania.

And Du Pont, in turn, got three of Sylvania's more important accounts. This is right after, your Honor, we are supposed to have made this conspiratorial understanding with them under which we would go as duopolists against the world.

The facts do not support the theory.

In 1931 it is also reported that in the first six months of 1931, Sylvania gained—that is the one I read.

In 438, in 1932, the next year, that in the last half of 1931, Sylvania got business with 94 accounts who formerly bought Du Pont film, for a total loss of business of 160,000 pounds.

And Du Pont gained business from 49 competitive accounts with a volume of 55,000 pounds.

And in 1935 the evidence shows that U. S. Envelope bought 649,400 pounds in 1933, during which it used only Du Pont film. And then it is reported that in early 1934 they asked Du Pont to give them preference in the purchase of envelopes. In other words, they said, if your Honor please, "You buy your envelopes from us, and we will continue to buy your cellophane."

And Du Pont refused. We weren't able, it says, to make a satisfactory reciprocal arrangement, and we lost 270,000
7850 pounds to Sylvania on that account. And we will have more of that in the evidence.

In 1934, GX-443 reports that Du Pont lost approximately 915,000 pounds of business to Sylvania, with the major part of the losses in baked goods, cigars, agents and converters. That is almost a million pounds in 1935.

In 443 it is reported that in 1934 Sylvania, by capitalizing on its second-grade quality, secured 300,000 pounds of the baking industry business formerly enjoyed by Du Pont. And with this entree into the business, secured 50,000 pounds of first-grade business with accounts that had used Du Pont film exclusively.

It is also reported in that year in GX-443 that Du Pont gained 88,000 pounds, and Sylvania loss 90,000 pounds in the meat industry, because Du Pont secured a greater share of the direct business with the "Big Four" packers.

On the other hand, Sylvania converters gained 160,000 pounds in the meat industry due largely to price and other concessions.

In GX-76, in 1935 Du Pont lost to Sylvania 100,000 pounds on National Biscuit; 160,000 pounds on Ward Baking, all of that going to this control we had of the major outlets.

In 1935, American Paper Goods went 100 per cent Sylvania, according to GX-77, because of higher converting costs with Du Pont film.

7851 In GX-78, in 1938, American Tobacco Company on a policy basis shifted cigar and smoking tobacco wrapping to Sylvania. Also in 78, in 1937, Kraft, which had been purchasing Sylvania film for caramels through printers specified Du Pont film on a large proportion of the film and we got it back.

In 1938, according to GX-493, Sylvania attacked Du Pont's largest accounts on a policy basis of carrying roll stock in all warehouse points.

In 1939, GX-79, Sylvania gained a transition of about 798,000 pounds principally from large type users who previously bought almost 100 per cent Du Pont. The basis of the inroads was promotion of the warehouse and the supply idea backed by guarantees of indemnifying customers for any loss or rebates under quantity purchase agreements in existence, 798,000 pounds.

And there are documents pertaining to A and P and to general baking, to the Keebler Company, to a whole host of large accounts where back and forth is this pull and tug of business.

Let us take a look at two or three concerning quality and service, because these go to the issues of control of technology and suppression of Sylvania.

GX-77, reports that Du Pont lost the business of the Union Bag and Paper Company to Sylvania in 1935 due to difficulties
7852 in making Triple-X coffee bags with Du Pont moisture-proof cellophane, and that the satisfactory performance of Sylvania's film and Sylvania's willingness to honor all complaints without question got Sylvania the business.

There is a similar story with respect to cigar wrapping, and the accounts of Puerto Rican American Tobacco Company.

A similar story as to Kraft Phoenix Cheese, your Honor, in GX-80.

And there is evidence of their penetration into the cigarette field, which is the Field that the Government always emphasizes that we particularly had locked up, and a whole host of exhibits showing Sylvania's successful solicitation of the business of the large cigarette companies, and in obtaining that business.

In 1938 the exhibits report Sylvania was selling Reynolds, Brown and Williamson, American Tobacco, and Steffano Brothers for cigarettes. In 1940 in the cigarette field Sylvania had 1,000,200 pounds with Reynolds. They took Du Pont's business in 1942, according to the exhibits, on Brown and Williamson and Imperial Tobacco, by better service.

There is a whole series of competition on the cigar business.

And then we go up, over to the converters, your Honor.
7853 You will recall the charge that we had these converters tied up; there wasn't competition there. Well, let us look at that, too. Series after series of exhibits show the competition that Sylvania was able to give Du Pont because of its converters.

GX-5001, for example, in 1934, shows that in 1934 Oneida Paper and Bag Company and Equitable Paper and Bag Company, both Sylvania converters, made inroads in Dobeckmun's, Union's and Continental bag business by underselling them. Sylvania converters' selling efforts were becoming more intensive.

Take another one relating to the Armour account in GX-80, in 1940, in 1938 Armour and Company, which had purchased for several years almost exclusively through Shellmar, that is Du Pont's converter, transferred its annual contract to Daniels Manufacturing Company on a price basis unattractive to Shellmar. So these poor struggling converters of Sylvania cut the price below what the Du Pont converters charge, and take one of these weak little customers, Armour and Company, on an annual basis.

GX-5046, Du Pont's first two converters, American Paper Goods, they started with them in 1925, and Alexander Hertz in 1926, are shown by 1940 to be purchasing ten times as much film from Sylvania as from Du Pont.

And then what about price? There is a lot of that, too, the record. I will read again only a few.

7854 GX-437, for example, in 1931, it reports Sylvania made sales increases in the first half of 1931 by a policy of giving quantity prices on split shipments, supplying second-grade material in unlimited quantities, or selling first-class material at second-class prices, all price cutting activities.

GX-438, in 1932, reports in the last half of 1931, that many customers stated Sylvania moisture-proof appeared to be first-class, although billed at a second-class price. Price cutting again and price competition.

It is also reported that in 1931 Sylvania gave price concessions by free delivery and quantity prices on small shipments.

And it is reported in 439 that for the first half of 1932 the principal reasons for Sylvania's gains in the baking industry were more lenient credit terms, quantity prices on smaller shipments, and a local warehouse in Atlanta.

7855 In GX-442, in 1934, Sylvania's gains in 1932 resulted mainly from meat, wherein Daniels—that is their poor struggling converter—consistently underquoted recognized cellophane printers—textile, baked goods, and paper goods, where Sylvania supplied unlimited sections at discounts ranging from 25% to 50%.

This is their price rigidity.

In 443, it is reported in 1935, as a result of special price concessions by Sylvania, A & P, Quality Bakers, and Freihofer Baking Company favored Sylvania as a source of supply in 1934.

Another one in 1939, GX-79: Sylvania displaced 60,000 pounds of Du Pont film from macaroni products in 1938 principally through the offer of a special deal on 450 gauge second grade sheet. In 1939 it is also reported that it took business on paper products from Du Pont in 1938 by promises of advertising cooperation and a special deal.

It is reported in 1940 in GX-80 that Du Pont lost business in the meat industry in 1939 because they wouldn't meet Sylvania's price concessions on second grades.

Now, there is more of this to come, your Honor, and when this case is briefed to the Court, the whole volume of these, of which I have simply read a sample, can be organized and presented, but

7856 I remind the Court again to realize in this section and in other sections of the great wealth of proof which exists in the Government's case which refutes its own contentions; and as for trade reports or proof of a specific shift of business, that has much more evidentiary value than a theory developed by looking into price schedules unrelated to market activity.

Now, I wish to offer at this time, preliminary to discussing, this group of additional examples which we have presented here in Exhibits 536 to 591, inclusive.

Mr. MINICUS. Your Honor will recall that we have an objection to 538 based on the witness' testimony yesterday, on the grounds that the document is irrelevant and immaterial, that the companies shown there manufactured many other products than those involved in this section, and if their asset value, that is, the asset value of Sylvania Corporation, which made other products, and the American Viscose Company, which makes a great many other products, and in which operation cellophane is very small, have any relevancy at all, they can only have relevancy in relation to the entire asset value of E. I. du Pont de Nemours & Company.

The COURT. I think you have pointed out the critical weakness of the exhibit, but I am going to admit it anyhow.

Mr. MINICUS. Thank you, your Honor. On our rebuttal we shall re-offer the assets of the Du Pont Company.

7857 (Defendant's Exhibits 536 to 591, inclusive, received in evidence.)

Mr. GESELL. They have never offered that, your Honor, and I don't want to pass this exhibit in terms of it having a critical weakness. We are going to hear a lot in this case as we go along about poor struggling Sylvania, and isn't it important, if your Honor please, to know what its assets are, to know that it is a $165,000,000 company.

The COURT. It could be worth six billion, but I am interested in what its proportional participation in the cellophane industry or the packaging industry is. I think Mr. Minicus has a point.

Well, don't pause to stress it now, but it seems to me that you take the totality of assets of the company. I can't see the relevancy of it.

Mr. GESELL. Well, when we were on potential competitors, your Honor—not to labor this—but when we were on potential competitors, I understood that one of the matters that concerned the Court at that time was what was the size, what was the potentiality for competition of these people not in the business at all? Now, even within the area, where they are in the business, the question of their size has something to do with their ability to compete.

The COURT. It may; it may. There again you are dealing in what you have condemned the Government for doing. You are dealing in a theoretical concept. What is the fact of

7858 participation in the industry? That is what interests me.

Mr. GESELL. All right. We can measure that in different ways. We can measure that by, how do they compete? We can measure that by the relative amount they make and sell. We can measure it by——

The COURT. You say that they had a high potential of assets and that they were a big company. It is like saying that if the Ice Age hadn't stopped, Greenland would now be in Florida. The fact is they only had a certain participation in the business of selling cellophane, no matter what their potential was. The fact is we have a certain percentage of business that they got in the industry, and they may have had a vault full of gold, but the fact is they just didn't do it. They haven't got 50% of the business.

Mr. GESELL. They are supposed to have been suppressed.

The COURT. Well, I am making no comment on that.

Mr. GESELL. The first two schedules, your Honor, 536 and 537, bring up to date Government exhibits which show the relative proportion of plain and moistureproof cellophane made by Du Pont and by Sylvania year by year down to 1950.

In 536 we present the annual dollar volume of sales, and in 537 you have there the pound production, and I think a rather interesting comparison of the percentage increases and decreases
7859 in capacity achieved from year to year by Du Pont and Sylvania during the period covered by this schedule.

Mr. MINICUS. If your Honor please, I don't like to interrupt, but Mr. Gesell made one rather serious slip here. I know he didn't mean to do it. He said "pounds of production." I want to point out that this is in pounds of sales, and I would like to have the record show——

Mr. GESELL. Isn't it related to capacity, Mr. Minicus?

Mr. MINICUS. Capacity you have related to sales. That is the thing that I have difficulty understanding.

Mr. GESELL. That is exactly what I am talking about.

You will see the percentage increases of the pounds of production or capacity under the capacity schedule, and that is compared against the poundage figures on the left under "Pounds." Then you will see the different rates of increase from year to year in capacity of the two producers. Take it across in say 1946, for example. There was 11.3% increase there over the previous year on the part of Du Pont and a 19.0 increase on the part of Sylvania, and as you compare those you will see that there was no similarity in the rates of increase from year to year as between the two producers.

The COURT. Under the column "Pounds", and directing your attention to Sylvania, what fact is there in the record
7860 or will be in the record which will explain this high climb in production of Sylvania from 35 million in 1946 to 60 million in 1950? Have they increased their plants, put in more machines?

Mr. GESELL. If your Honor will turn to the next exhibit, you

will note that that date marks the acquisition of Sylvania by the larger concern, American Viscose.

Mr. MINICUS. Your Honor, if I may, I would like to point out that the Court this time said "production." These are sales figures, your Honor; they are not production figures.

The COURT. Well, they had to produce it to sell it.

Mr. MINICUS. That is true.

Mr. GESELL. These show the percentage increase of sales by pounds in relation to percent of capacity, but, your Honor, that schedule, you see, now takes on a little more significance. We were supposed, you know, to have kept American Viscose out of this business. That is one of the charges, they were suppressed. You will see when they came to the business—your Honor appreciates they had technology and knowledge, through their manufacture of rayon—that a substantial growth took place. I think you should also notice that there was on the part of both producers quite a jump in that period which reflected in part the rather artificial limitations on the production and sales of both parties, which
was brought about by war-time limitations or raw mate-
7861 rials and matters of that kind which we have discussed in
the case. To some extent there was a freeze at about that time.

I have already called the Court's attention to the fact that Du Pont's increase in about that period was achieved without the addition of a single additional casting machine.

The COURT. What is your most recent plant?

Mr. GESELL. Clinton, Iowa. The most recent plant, however, is Olin's plant, which is not Du Pont's.

The COURT. Where is it, by the way?

Mr. GESELL. That is down in Pisgah Forest, North Carolina. There is a picture of it. I think it is the last exhibit in our case.

Now, starting at 539 and going to 566, we have a group of general documents concerning this competitive picture. There are a few price examples in there, but in the main the price examples are accumulated in the section which follows that group. These are arranged chronologically, and various different aspects of competition are illustrated.

In this first sales record in 1932 I direct your Honor's attention particularly to the summary at the bottom of 996. It shows 6.80% business gained by Sylvania, and then a discussion of particular accounts that shifted and the reasons why they shifted. Schwab shifted because Sylvania was offering lower prices in the
cigar trade there on 997. The Regensburg Company there
7862 at the bottom shifted on grounds of quality. They in their
machine making test for cigar wrapping thought Sylvania's product ran better on the machines.

There is a list of specific accounts on the next page which used Sylvania material and are returning to Du Pont material; so there in this little study you see examples of shifts of business in both directions, based both on quality and on price; and then an analysis of that report appears in 540, in which Mr. Benz, discussing the problem in the cigar business and analyzing the figures, concludes: "* * * I believe all of the above figures indicate a serious loss of business in the cigar industry, perhaps more serious than we have thought, and I think they clearly show that Sylvania have gotten more of this business than is indicated in the above report."

In 541 there is discussion of the competition being offered by a group of Sylvania printers and bag manufacturers, and we are emphasizing quality, and the report says, "You should make it a point to get this quality story over to the purchasing agents of your customers using bags and printed cellophane so that it will register unmistakably and strongly and thus build up a resistance to cut-price tactics."

Earlier it is reported that these Sylvania fabricators or converters are cutting prices, and we are saying to the salesmen, "Go out. Specify Du Pont cellophane. See if you can't sell quality to fight the price cutting."

7863 And then, your Honor, here is a document which we wish to give some emphasis to—542. It is one of several which disclosed Du Pont Company's view at that time as to the effect upon Sylvania's competitive position resulting from the fact they were licensed under the moistureproof patents, and they disclose that it is the Du Pont view that the license to Sylvania enabled Sylvania to compete considerably more effectively because, having rights under the patent, they were able to improve quality. This one is about a year after the license.

This is Mr. Yerkes' report to the Board of Directors in 1934. It says, "Our competitor's big increase in the proportion of the total business did not take place until the first six months of 1934."

Dropping down, he says, "Our license to Sylvania to operate under the moistureproof patents was sold to them in April, 1933. It is evident that from this time on, through most of 1933, they were engaged in improving their quality by the use of our moistureproof patents and it is my opinion that they gradually arrived at an improved product by the end of 1933. I believe this is the fundamental reason why our competitors showed such an increase in the first six months of 1934."

The COURT. Do I gather from DX-542 that L. A. Yerkes was the author of DX-543?

Mr. GESELL. Of 543? I don't think so, your Honor.

7864 The COURT. You say, in DX-542 there is a discussion about the attached report. I am wondering if 543 is the attached report.

Mr. GESELL. Yes, but I don't believe that Mr. Yerkes was the author. I think that 543 is a report that came to him from his organization, and he is transmitting it to the Board and commenting on it with this covering letter.

No. 543, while we are on that, is similar to the document the Government offered showing the situation as to P. T., and we put in here the one relating to moistureproof, which, of course, is the more important product. He says that Sylvania has improved their position in nearly all the major industries, referring to baked goods and the cigar industry—the fact that their product has a better running quality—and then he summarizes in the last paragraph on page 1002:

"The problem, therefore, is to either improve our moistureproof cellophane in the qualities which are lacking or if absolutely necessary, to offer two products, one with the protection paramount, and the other with low protection but better machine running qualities. This latter alternative will not be attempted until we are sure that the first cannot be accomplished"—and, of course, it was.

The COURT. The phrase "machine running qualities" has appeared intermittently throughout your evidence. What does that mean, the manufacturing process or the utilization
7865 by the converter?

Mr. GESELL. The utilization by the converter or the user, his ability to take the material and run it through his fabricating machinery to make the package he wants. They are questions of speed and tension, uniformity of grade, and so forth, that are involved.

Now, it is interesting, your Honor, in passing, that Mr. Yerkes does not say to the Board of Directors, "You know, when we licensed Sylvania, they were not supposed to do this. We had formed a duopoly, and we were out to get others." The first thing he reports is, "Look, they have got the license and they are going ahead, and they are cutting into our business," and you can see from 543, which I wish to take a little time on, the extent of that competition and the nature of it.

First of all, the report reviews, page 1007, the competitive conditions prior to the license, and it says that certain important users couldn't consider Sylvania material inasmuch as they understood the process was a patented one owned by Du Pont, and that Sylvania had found it a definite stumbling block to secure participation for that and other reasons, and for a long time, it says, that Sylvania had maintained a product produced by what was known

as a three-way formula, against the four-way composition in the Du Pont patents, and that that had brought about the manufacture of an inferior material from the protective standpoint, and
7866 the competition didn't change over until the litigation was settled.

And then he reviews in the report what has taken place in detail in terms of selling competition. This "he" here, your Honor, is a reference—you will see in the documents—he calls it the competitor's ability or the competitor—he says, "The competitor found it possible to make substantial headway in the baking industry also because of the largely increased use in baked goods."

A little later on, on the next page, 1009, "Competition has presented their material with a lighter heat seal and a satisfactory opening quality to the cigar trade, with rather satisfactory results to themselves. They have, undoubtedly, shown substantially less sale in the first half of this year to the same trade. * * * We estimate our competitor's increase in this line at 20,000 pounds during the first half of 1934."

Then there is a discussion of quality. We say we have had complaints from some of our customers about the poor quality of our material on cigars, and that has been our most difficult quality problem, and the documents show that Sylvania has a film that is more satisfactory in that area.

Let us look at "Special Deals" on page 1011.

"There are a number of cases where special arrangements have been made by the competitor providing for the use of his material, in some instances on a rather unusual basis," and he talks
7867 about the Freihofer Baking Company, and there Sylvania is paying for Freihofer's advertising in the comic supplements of the Philadelphia papers.

The COURT. On the fourth line of page 9 of DX-543 there appears the word "Sylphrap."

Mr. GESELL. That was the trade name for the Sylvania moistureproof film.

The COURT. Is it still known as that?

Mr. GESELL. I guess it was the plain film, and their moistureproof was known as Nymphrap for a while.

You will notice the Sylvania Company is also paying advertising allowance on the American Chicle Company, and then down here it makes clear that substantial business was lost to those two accounts because of this free advertisng.

And then here is another special deal that Sylvania is making, cutting into the business: At the bottom of page 9 it states that, "We"—meaning Du Pont—"have never been accustomed to extend our quantity discount to any group of buyers except those

owned by one financial interest, and we continue to maintain this policy," and it goes on to say that Sylvania has encouraged the Quality Bakers Association, which is the group of bakers unrelated by any financial ties, and it gives them a quantity discount. You will see there on page 10 that the competitor's custom is to offer them the privilege of buying on a quantity discount basis by combining their purchases, and that is done as to con-

7868 verters and it is done as to quantity bakers. The result is that there is a price cutting device by which the business of a number of concerns is being obtained.

7869 Then he talks about A and P and says that Sylvania made a special arrangement with them, the details of which we have been unable to learn, but which is presumably founded on joint discount between printed wraps and on printed materials.

Then they talk about the loss of business to U. S. Envelope on reciprocity that I mentioned.

Then we get to one other price cutting device over on Page 12, where Sylvania has one price for first-quality and a lower price for second-grade quality, sells as second-grade first-grade quality, and in that manner cutting the price.

Mr. MIXICUS. It doesn't say so in this section.

Mr. GESELL. And then if we go on to Page 14, there is a comment about competitive sales in the cigar business. It says, "We have estimated that we have lost to competition during this first half of 1934 37,000 pounds."

And then over on Page 15, you will see an analysis of the actual loss of business by this price-cutting device that I was talking about a minute ago, to specific accounts and to specific quantities where seconds have been sold—seconds in quotation marks, meaning first-grade material at second-grade prices, and the loss of business to Cox Baking, W. Long & Company, and other accounts listed there.

7870 There is an analysis of the loss of business to A & P, and to the Envelope Company, and the amounts involved.

And then if your Honor will see this analysis in detail which appears on 1002 of this Exhibit, you will notice the different titles under which this analysis of Sylvania's activities was compiled, and the amount of business involved.

93,000 pounds because of credit.

77,000 pounds because of price differences; the second question, 93,000 pounds, quality.

There is an analysis there summarizing the different reasons for the loss of business. And then as we pick down the list, here is a complete study of all of Du Pont's accounts where business has been lost to Sylvania, and a statement in each case of the principal accounts and the reasons why they have been lost. And

you have every kind of a reason here that you would expect to find where competition really exists.

The COURT. On Page 1022, the first item, General Baking Company, what does the figure 35,000, and then a symbol for number included in parenthesis mean?

Mr. GESELL. That means the pounds of business involved on that account. And it is those figures which add up to the summary under "Reasons" which appear above.

Over on 1023 you will see that in some cases Sylvania equipped wrapping machines with a sealing device that the
7871 customers liked.

In some cases business was split.

In some cases there was a personal preference.

Over in 1025, you will see the substantial loss of business there through this business of giving quantity discounts to these trade groups, like Quality Bakers. You will see on seconds and thirds, and the price cutting that that involves, numerous cases of loss of business because they under-quoted in that way.

You will see some claims of quality on 1027, a problem of odor of the material, the wrapping efficiency, heat sealing, and then over on prices you will see a whole run of cases of prices beginning on 1028.

Advertising allowances to the Chicle Company, cases where a whole series, where machine-running qualities got Sylvania the business. And so it goes all through that analysis.

And then in the next exhibit, 545, we have a discussion of the converter situation in 1936, and a showing of Sylvania's gains in the converter business.

In 547, there is a report, a monthly sales report there in which this statement appears over on Page 1042, "Our principal competitor's campaign on our large accounts is intensifying. There is ample evidence of every type of concession except the breaking of the basis price schedule, including split shipments, pay-
7872 ment of transportation charges, payment of increased quantity discounts, claims of better yield."

The COURT. Did you say the other day that J. E. Hatt has since died?

Mr. GESELL. Yes. I intend, your Honor, to give the Court a list of some of the people here who have died, and who are unavailable as witnesses.

There is reference here to competition from foil, and other materials, but that matter is getting pretty obvious now.

Then there is an analysis of physical testing of Sylvania film as against ours in 548, quite a detailed analysis. You will see some of the various items summarized at various points, and you will see that on tumbling, Du Pont is better; on tearing and im-

pact, Du Pont is better; sticking and gluing, Sylvania is better. We caught up later in that area.

We see in particular that they have an efficient cigar seal. And you will notice under that that during 1936 and 1937 competition was better than cellophane, meaning Du Pont cellophane. However, during 1938, with the plant scale production of a new cigar formula, cellophane showed a marked superiority over Sylvania film.

So that they were hot and heavy on the cigar business. They had us licked. We improved it. We got our position back.

7873 Then in 549 you see Mr. Hatt complaining on the basis of a report in that year that Du Pont is out doing the development work, and Sylvania is coming along and riding the coat tails.

I think the report shows clearly that we do the development work, and then competition comes along and takes a nick in the big ones.

And he said that if competition continues to cut prices on the seconds, I would think the time might come when we would have to consider seriously what we are going to do about it.

He doesn't say, "Look, they are not supposed to be doing this. We have got a deal. We have got some under-the-table understanding. We are a duopoly. This isn't supposed to happen."

Here is a Sylvania document at Page 1055 stating their work with converters following along their list of converters, they are telling their salesmen to shift the business to their converters.

Over in 543, more of the same discussion about the quality; 554 and 553, both.

Then, of course, in the later years we see the fact that both companies are under allocation, during the war years, but we saw even there that there is some competitive jockeying back and forth in the later exhibits, and there are some trade reports relating to that as well.

7874 In 562, your Honor, is a rather detailed analysis of the competitive situation, and here it is somewhat different, and I think of value, in that there is an analysis point by point. What is going on in Boston? What is going on in New York? What is going on in Philadelphia? And there is evidence of the competition not only by Sylvania, but by other films as well, Kansas City.

Sylvania continues to take pot shots at our largest pieces of business, and they are now supplying film on a regular basis to three of our most important accounts.

It is reported that the Aluminum Company has appointed Western Wax as their converter, and so forth.

But there you can see a pull and tug between the specific producers in the major cities in 1946.

And that report carries over and shows the comparable information for a number of cities in 1947.

And then finally we have the ultimate in this competition in 564. The Government brings the suit against Du Pont, and the first thing Sylvania does is go out to the trade and say, "Look, the Judge is going to take a plant away from Du Pont, they won't be able to supply you. You better come with us, and let us sell you."

So that the competition continues.

The COURT. Will you look at DX–563, Page 1091.

Mr. GESELL. Yes.

The COURT. The last section under what is called
7875 "San Francisco."

Mr. GESELL. Yes.

The COURT. Goodyear was working quite hard with their 75 film in the pre-packaging of vegetables. What is the trade name——

Mr. GESELL. That is pliofilm. You will find many documents referring to pliofilm as a rubber film, a rubber hydrochloride film.

The COURT. Would it be the pre-packaging of vegetables in the same sense of cellophane?

Mr. GESELL. Yes. That is, in fact, your Honor, where pliofilm has had the biggest development, permitting the display on self-service counters of fresh produce and meats wrapped in that material.

We are going to have a witness who will discuss the development of that market in detail.

The COURT. All right.

Mr. GESELL. Now, we come, your Honor, to a group relating to price competition, which we have put together here, and they cover the group from 567 to 591.

The first is a discussion of the situation in Atlanta in 1944, a report to Mr. Hart from Mr. Clark. He reports that Sylvania has opened a warehouse in Atlanta, and it says that their price policies, et cetera, developed an extremely competitive condition.

In fact, the area probably became the most competitive area
7876 in the country because of many and various practices used.

And then look at the practices used, and if that doesn't fill the whole book of price competition, it's hard to know what would.

The COURT. With reference to all these exhibits, when there is a report from one person to another, are these merely copies, because nobody ever signs them.

Mr. GESELL. These are not copies, your Honor, in most cases. It was in many instances not the practice to sign them. They were routine, every-day reports. You will find that they are more apt

to be signed as they go up to higher authorities than these that come from the lower echelon.

But you will see what is going on in Atlanta.

The shipments in C, for example, total shipments during the month govern the price of the shipment. In other words, they let a man build up his orders for a whole month and then trade it as a single order for price purposes.

They are changing their schedule as to discounts in D. They classified their shipments so that lower transportation rates applied.

They allowed cash discounts beyond the 10-day period.

They were selling thirds with the discount ranging as
7877 high as 38 per cent, and selling seconds with discounts as high as 28 per cent.

A liberal credit policy; less than case lot quantity at case lot prices; lavish entertainment and gratuities.

In fact, as the report says, almost any means was used that might give a slight price differential, in addition to their better service position, in order to attempt to take business from us with those accounts in which we were strongly entrenched.

And to compare that with this business that appears in the Government's complaint in Paragraph 29, "Prices charged by Sylvania, the sole alternative source of cellophane, have followed rigidly the line of prices established by Du Pont. Price competition has been and is non-existent in this industry," well, your Honor, there is just no relation between the two, and I do not get the impression that there were may theorists in Sylvania when they were establishing this policy for the Atlanta Area.

And then we go on here with various instances of price——

The COURT. Have I any way of knowing what the date of DX-567 is?

Mr. GESELL. Yes, it is at the top, June 1, 1944.

The 1944 is a little illegible, but it is 1944, your Honor.

The COURT. I see.

7878 Mr. GESELL. You will notice, Mr. Brown reporting to Mr. Hines in 1946 that Sylvania has a price advantage of 1 per cent due to their cash discount.

And then these first two or three merely serve to show the current price situation.

As your Honor is aware, from 1941 to 1948 Sylvania's prices have been lower by about a half a cent a pound.

Then we pick up specific instances at 571 that go back chronologically and come along here. The first one is a trade report in 1931, Exhibit 571. That has to do with split shipments.

Your Honor understands what the split shipment price cutting device is?

The COURT. No, I am not clear on that.

Mr. GESELL. The price schedule says that if you make an order for so much, such and such a price applies. Sylvania permits, by split shipments, the sending out of several smaller orders to which the prices would not apply until they reach the quantity, and then give them that price.

Here the customer says that he would use Du Pont cellophane if Du Pont would give him split shipments.

We explained our prices were based on the packaging costs, and we couldn't do it.

There is another case of split shipments in 572, and you will see an explanation of how it works, your Honor, so that you do
7879 not have to rely on my statement, in 573. There is there a detailed explanation of how the split shipment works. The split shipment works as follows: "Place an order for a case of Sylphrap, and take out as much or as little as you want. If you haven't taken out a case by the end of the month they call you up and ask if you want the rest. If not, you pay per quantity schedule, if yes, you are billed at case prices. Invoices are then sent out."

GX-502 shows, for instance, that the case price was 2.2 cents. The smaller price was 2.6 cents. So by following this device through, there was a cutting of the price by 4/10 of a cent. The price applies only to quantities of special amounts, as those Government exhibits show.

Now, here is a case in 574 where the customer was staying with Sylvania because of split shipments, delivery advantages, and also because the seconds seemed as good as the firsts.

575 is another example of service operating and split shipments being allowed by Sylvania.

And then here in 576, you see Sylvania breaking its quantity discount schedule, because there they are giving a better price by giving a rebate check on less than $10,000. $10,000 in the price schedule is the bracket where their quantity discount started. They were giving quantity discounts on amounts below that. Therefore, they were again cutting the prices.

7880 We had a 10,000-pound minimum in our schedule, and they say that they would buy our material if we would rebate them on less than $10,000 amounts, which we won't do.

There is another one of the same kind in 577, in which the situation is analyzed, and the Du Pont salesman there says, "We can obtain business if we will meet Sylvania's prices."

Then in 579 there is an A on that, which is legible, your Honor, where Mr. Brown reports in 1939 to Mr. Benz on the subject of competition, that he has a report that there is more chiseling going

on at the present moment by our major competitor than ever before.

He mentioned three or four accounts, 100 per cent of the customers who reported in confidence that the competitor had offered to sign them on agreements based on discounts of $3,000, or if they don't qualify at the end of 12 months, they will extend the period.

The COURT. I guess your position is that one would not be apt to call a fellow conspirator a chiseler?

Mr. GESELL. No.

And none of this even squints in the direction of rigidity.

The COURT. Let us take our morning recess.

(At this point a brief recess was taken.)

7881 Mr. GESELL. We had just come to another example of price tactics at Exhibit 580. Therefore, under our arrangement, we go back to an early date and come up again chronologically. This one is the practice of Sylvania with various accounts of offering first-quality cellophane at second-quality prices, which, of course, was substantially lower. Here in this account Sylvania moistureproof seconds were offered as having the quality of firsts and priced as seconds, and the customer says that for that reason he is taking Sylvania material.

581 is more explicit on the same point. There is an account that has a candle business, and there the man interviewed is reported as breaking down finally and telling the Du Pont salesman that Sylvania had offered them an opportunity to save thousands of dollars per year in operations with transparent sheeting. Sylvania has agreed to give them a superior grade of seconds "much better than ordinary seconds and practically equal to firsts at the regular 25% discount." Also second-quality at ridiculously low prices.

And then the next one the salesman reports—this is now up to 1940 in these illustrative examples—the same thing, where he says a monkey wrench was thrown into the gears this season in the form of Sylvania coming in with seconds "just as good"—meaning just as good as firsts, at 47% discount.

7882 "I made it very clear that we have never recommended second-class stock as a primary wrap on quality packages," and so forth. "However, when the competitor entered the picture with the tactics described, the lid is off."

And later, competitors reported as taking away business because of this 47% discount.

Here is another example in 583, in special concessions as to free delivery.

Another one is 584.

Then there is one, your Honor, in 585, which is worth stopping on for a moment, involving a pie company, and the report is that

Sylvania has two or three times during the year delivered thirds here at larger discount than 15% off list. And also the salesman rather pleadingly reports, he says that he has been contacting this buyer, Miss Holmes, and he feels he has a real opportunity to secure 50% of the business, but Sylvania will unquestionably secure half or more in view of their generous entertainment program here.

And so it goes with different examples in 586, this question of thirds being priced as seconds, which is just a continuation of the same thing as offering first-class material at second-class prices. The discounts are mentioned again.

The clock company in 587.

And then if your Honor will turn to the last of these exhibits, 591, you will see a comparison of Du Pont and Sylvania prices brought up to date from the date where the
7883 Government schedules left off. There is one correction on it, your Honor, on the schedule, which I don't believe appears in your copy, down on the lower left, where it says, "Separate and higher prices for quantities less than 500 pounds." That first "no" should be a "yes."

Now, if your Honor will glance across the schedule, we show each of the different price dates and compare the Du Pont and Sylvania prices for the various types and grades that are listed in the left-hand column, and in all places where the Sylvania price is in a box, that price is different than the Du Pont price. So if you take a glance across there, you can see, for this period beginning in 1946 and continuing on through to 1950, the price differences that have developed as between these two concerns. Where the schedule in a few instances says, against the type, "No data," that is intended to mean that we don't know what volume of Sylvania was comparable to the particular type at that time; but you will see that beginning June 1, 1947, and some in January 2, 1947, and continuing on, the degree of price disparity which exists. Those prices now are still different and frozen I think at different levels under the price control program. There also is a difference in converter discount shown against that heading "Converter Discount" for several of the years.

Mr. MINICUS. Now, if your Honor please, I would like to
7884 consider first the small section entitled "Schedules" that the defendant has put in evidence. Schedule 536 we have virtually no comment on. It is an extension of the Defendant's Exhibit in this regard.

Mr. GESELL. You mean the plaintiff's.

Mr. MINICUS. The plaintiff's exhibit in this regard, except that it carries it down to the current date. The defendants omit to

point out the comparative participation of the two companies in the market.

7885 Now, Schedule 537 is a table bearing the title "Comparison of Du Pont and Sylvania Sales of Cellophane and Annual Rates of Increase Plus Per Cent of Capacity."

Now, there is a column there, per cent increase or decrease from the previous year. And that is noted for both Du Pont and Sylvania. If one permits one's eye to run down that column, they will notice that some years Du Pont had a greater rate of increase than Sylvania. In other years Sylvania had the greatest rate of increase. It did fluctuate back and forth.

This question came up when the Government's economist was on the stand, and I think Mr. Cook's answer is conclusive, regardless of this variation in the rate of increase year after year, we have an approximation of the 76–24 per cent ratio of participation in the market.

So that where one sees an increase in per cent here, it does not necessarily—in fact, it does not change the ratio particularly for that year. As a matter of fact, one of the Government economists has run up this ratio taking it from 1940 to 1950, the past decade, and if you consider the rate of increase for a decade of both companies, you come to some very surprising results.

Now, with regard to sales, just what is represented here? We find that from 1940 to 1950 Du Pont's rate of increase was plus 148, and Sylvania's was plus 122, almost identical.

7886 We do have some question about the standard that was used on this chart, and it was to that that I was addressing my comments at the time the table was being offered in evidence.

You will note, your Honor, that this rate of increase as related here to capacity and production relates back to sales. And again I say that if you relate your capacity or your rate of increase to production, the figures do change somewhat, and they are more in line, we think, with the actual representations.

In other words, capacity and rate of increase of the output of those capacities, is more logically related to production.

There, however, over a decade, the change is very little. We have failed, ourselves, to find any significance in this rate of increase chart.

Moving on from the section of schedules, we come to that of so-called illustrative instances of domestic competition. And Mr. Yerkes has offered in evidence Defendant's Exhibit 539 to 566 on this point.

These documents, if your Honor please, purport to show the development of a tremendous competitive struggle with Sylvania whereby progressive inroads were made into Du Pont's business.

7887 I do not think that there is any question about it, that the Government's documents as well as the Defendant's absolutely belie this fact. Now, right at the beginning of this discussion I think it is a good time to have reference again to the double aspect of this Du Pont-Sylvania relationship. We saw it very vividly portrayed in the moisture-proof patent pool. There it was the Government's contention, we believe supported by the proof, that as between Du Pont and Sylvania, Sylvania was suppressed in its activities, expressly suppressed with regard to its production under the quotas.

Now, when you have the two manufacturers of this film opposed to all others outside of the industry, there we urge that our document showed an attitude of collaboration.

Now, moving beyond the limits of the moisture-proof patent pool and into the field of general operations in the cellophane industry, we will take what the Government's tables and charts have established, this participation, this relative participation, in the market place of 76 per cent vis-a-vis 24 per cent.

Now, within that framework, our proofs have shown and will continue to show, within that framework of 76–24, Du Pont was very happy to have Sylvania in the market. It gave a semblance of competition in this industry. The entire record of their relationships will show that.

7888 We find on the advent of Sylvania, circa 1929, an attitude of frenzy in the Du Pont, and we first notice that this new manufacturer was going to commence operations in the United States, but within two years that whole thing changed, the documents changed.

I believe it was Mr. Yerkes or Mr. May who spoke about Sylvania being here and probably here to stay, and had some comment to the effect, "Well, the best thing to do is to get along with them and see what we can make out of it."

Mr. GESELL. That was Mr. Carpenter.

Mr. MINICUS. Then after that we have the licensing of Sylvania again within this quota system.

Now, as far as that goes, there certainly was collaboration with Sylvania. The suppression exists when Sylvania looks as though it is going to jump the fence and get outside of this 25 per cent participation in the market that it shows year after year throughout the Government's presentation of the case.

The Government's Exhibit No. 540 establishes that Sylvania's sales of cellophane from 1934 to date fluctuated in a very narrow range between 22 per cent or 25 per cent of the total participation in the market.

Du Pont, of course, enjoyed the remainder, which averaged out at a 76 per cent participation annually.

Year after year these percentages remain virtually static, and now that we have the Defendant's proof in, for the past four
7889 years, that is, 1947 through 1950, Sylvania's share has been below the average of 24 per cent. In other words, since the filing of this suit, rather than declining, Du Pont's power over the supply of cellophane has actually increased. Their own charts bear out testimony to that.

Now, the Government does not contend, then, that Du Pont subsequent to 1930 attempted to eliminate Sylvania from the industry entirely. That fact is not necessary to our case, any more than 100 per cent control is necessary to constitute an illegal monopoly. However, an inference is readily apparent from the documentary proof now in evidence to the effect that Du Pont was well satisfied with this 76–24 per cent market participation, for the reason of the semblance of competition presented thereby, specious though it was.

Now, naturally, and these documents show it, Sylvania made vigorous efforts to promote the sales of its product. These were necessary, necessary to maintain its market position at all, small though it was, considering that Sylvania was facing opposition from one of the largest corporations in the world, this is very understandable. They had to get out in the marketplace and scratch and fight and bite for business. They had to do that to hold their position.

On the other hand, we maintain that the proof has shown and will continue to show that Du Pont was vigilant to forestall any additional participation in the market by Sylvania.

The Defendant's documents purport to point up
7890 particular practices engaged in by the Sylvania corporation as illustrative of vigorous competition in the industry. Certain of these practices are delineated in the Defendant's Exhibit 543. Let us see what they are.

At Page 1012, your Honor, it is stated that Sylvania with some of its accounts engaged in an activity, a business activity, usually denominated as cooperative advertising. Now, this was before 1940, this document. The evidence shows, and they can't deny it, that during that very same period the Du Pont Company was allowing advertising allowances to its important trade. That is in the record. The two were doing the very same thing.

Mr. GESELL. I challenge that statement. We gave no advertising allowances to any direct users, and as far as I am aware, there isn't a single record reference in support of that statement. What is your record reference?

Mr. MINICUS. I am talking about advertising allowances to converters, your Honor.

Mr. GESELL. Well, you see, you see? These were advertising allowances to direct users.

Mr. MINICUS. I fail to see it, your Honor. An advertising allowance to a customer is an advertising allowance. The only difference is that the advertising allowance served a purpose. I don't think any promotional converter ever got one.

Now, the second practice complained about were
7891 to cooperative organizations, and the one that was particularly pointed out was the Quality Bakers of America. Now, what was the Quality Bakers of America? The Quality Bakers of America was a cooperative of a lot of small bakers who got together to pool their purchasing power.

So that the single organization representing all of them bought large amounts. In some cases it may be that shipments were made directly to the small baker. In others, it may have been made to the warehouse of the Quality Bakers and reshipped from there.

It was nothing more than a discount allowed to a large-scale purchaser, albeit the component parts of that purchaser were small. So here was a way in which some of the small buyers in this industry could get a bit out of this discount picture.

Du Pont has never denied that during this period they too allowed quantity discounts. We have seen that story in its entirety. The only people who ever got any quantity discounts from the Du Pont Company, your Honor, were the so-called important trade, but they were both doing it. But Sylvania, with its 24 per cent, had to cater to smaller buyers, where they could, trying to restrict things with the cigarette companies so that they would get some of their business, but they had to give a lot of attention to this little fellow.

Then we are told that there were split shipments,
7892 and the combining of indirect and direct purchases by a single user for discount purposes; I am sure your Honor will recall the extensive evidence that was introduced by the Government whereby Du Pont had an operation of splitting shipments. The material under the Robinson-Patman Section was replete with instances of where one of these units designated as important trade would have various factories in different parts of the country, and a shipment would be sent to the west coast and another one to the south and another one to the middle west, or where you will, and they were all added together for discount purposes at the end of the year. There is a great deal of that in the evidence.

And then this matter of reciprocity with the U. S. Envelope Company that appears at Page 1014. I would like to have your Honor look at that rather closely. It doesn't say anywhere in

there that Du Pont didn't engage in reciprocity. It is a well-known business practice. I know nothing about its illegality. I am not challenging that. It may be challenged some day, but not in this case, I hope. Reciprocity is simply a system whereby if you want to sell another fellow your product, he says fine, now how about you buying mine. And if Sylvania with the United States Envelope Company was able to engage in a little reciprocity, all I can think of is how much better a position Du Pont is in with the thousands of products it buys and sells, to also engage in it.

7893 That doesn't say it was against Du Pont's policy there. It just says it couldn't be arranged. And they went to Sylvania and they bought some of their envelopes, and sold them cellophane.

However, this matter of seconds really raises another point. There is not another instance, Your Honor, in all of this evidence that was introduced here this morning, even in these trade reports, that says that these seconds were anything else but seconds.

I spoke to Mr. Little of the Sylvania Company about this matter. He laughed. He said, "Ask them where they got all their seconds."

Seconds were sold. They were sold by both companies at so much. You do not pay as much money for seconds as you do for firsts.

Mr. Gesell will state that Sylvania probably had more seconds to sell than Du Pont. Maybe they did and maybe they didn't. I do not think that is very important. But this evidence in no place, no reliable evidence in here will state that Sylvania ever sold first-quality material as a second.

The salesmen out in the field didn't like it, I suppose. Maybe Du Pont was short of firsts or seconds. Later on in this evidence it will develop that at one stage Sylvania became short of

7894 seconds. One of their accounts was buying seconds from Sylvania at a cheaper price, and they didn't like it. And they wrote in a trade report that this customer was buying seconds, and they couldn't get their first-quality material. I do not think that is evidence or anything else.

Sylvania was fighting every day of its life to hold that 24 per cent participation.

The COURT. Let me see if I can follow you in your presentation correctly. You say Sylvania indulged in certain business practices. You say further Du Pont did the same thing. Now, the reason you assign to the business practices of Sylvania is that they had to do it to meet the competition. If that is so, then, why did Du Pont have to do it? For the same reason?

Mr. MINICUS. No, sir, not at all. In the first place, if I said they had to do it to meet the competition—if holding the 24 per

cent was competition, yes. Why, then, that statement does not need correction by me. But as far as Du Pont going in for these practices, there are many reasons, which will appear in the record why they were giving these various services.

And, now, in the case of the quantity discount, for example, we saw that there were some large and very important accounts. And the more that those accounts purchased in a year, the larger their discount was. And until Sylvania countered by meeting
7895 that discount schedule, the entirety of the business of that account tended to funnel into the Du Pont Company.

Now, as Mr. Gesell has said, there were advertising allowances given to converters. Most of those converters, if not all of them, that got the advertising allowances, were promotional converters. They were exclusive business.

Mr. GESELL. That is the third time he said that this morning, and his own proof shows those allowances were paid to the Cellucraft converter, who was a regular converter, and there is no proof in support of the assertion, any more than there is proof in support of channeling by these discounts.

Mr. MINICUS. My associates inform me that Cellucraft is the only one. Mr. Gesell can say that about, and he later became a promotional converter.

Now, this entire thing, your Honor, apparently ties up into these exclusivity arrangements, that when Du Pont gave these services, it was the same old story, the thread that has run through the material of this case, the entire cloth, of favoring the important trade. Sylvania was doing the same thing with less important trade. And we must never lose sight of the fact, your Honor, that inside of this whole pattern is the two-supplier situation that Mr. Gesell has referred to today as a duopoly, two suppliers, both following identical practices, as opposed in the market price by many sellers grabbing for their product. And
7896 both of them obviously pursuing the same policy. That is the thing the Government is talking about here today, your Honor.

7897 Then the Defendant's Exhibits 556 and 557 are offered to show that in 1942 Du Pont was particularly concerned with Sylvania's gains in the industry, and indeed in that year Sylvania's participation in the entire market reached an all-time high of 27.1%. That was the only year in which it ever exceeded 25%.

Now, that is the fact that is brought out by 556 and 557. Let us look into it. The defendant's own documents in this section establish that this gain by Sylvania resulted from its own policies, the Du Pont policies, and not from more vigorous competitive efforts by the smaller producer. Let us look into it.

Defendant's Exhibit 555, which is in this group, sets forth expressly Du Pont's anticipation of the effects of limitation order L-20 and its reactions thereto. This was during the latter months of 1941. Immediately following L-20 there was a dip in the demand. The market weakened, and Government's Exhibit 32, about which there was so much discussion on the case in chief, conclusively establishes that on May 15, 1942, Du Pont shut down its plant at Buffalo in anticipation of the decrease in production.

Now, I will admit very readily that some months later the Government came along and arrangements were made for that plant to be converted to tire yarn, but the reason it was shut down was because of this slight, very transitory dip in the
7898 market.

Now, during the year 1942, the year after this plant was shut down, Du Pont's production—and the charts that will come in evidence today show this fact—Du Pont's production of cellophane declined 20 million pounds, just about approximately the capacity of that one plant.

Well, it is quite obvious from that that Sylvania's increased participation in the 1942 market, which did start to strengthen as 1942 went on, resulted entirely from the retrogression in Du Pont's output, regardless of whether it was intended to curtail the supply or resulted from a miscalculation of the potential market.

It was that lessening of their output, with Sylvania almost remaining on the same productive level—not quite—that caused the Sylvania gain. The important fact there is that Sylvania cut its production, and just at about the same time the shortages of cellophane became more severe.

Now, they are attempting to derive benefit from the fact that Sylvania, which did not shut down any productive facilities at that time, gained temporarily in market participation during 1942. I submit, your Honor, that the vigor of the competitive forces in the market at that time had very little to do with the one year that Sylvania got over 25% participation. The entire record in this case is replete with proof that in Du Pont's eyes Syl-
7899 vania was a tolerated intruder in this market but never a competitor in the true sense of the word.

Now, I would like to consider certain other miscellaneous matters raised by these comments or these documents that have been offered today which bear upon other aspects of the case in the particular heading we are on.

The COURT. We will take them up after lunch.

(At this point a recess was taken until 2:15 o'clock, p. m., the same day.)

2:15 O'CLOCK, P. M., THE SAME DAY.

Present: As before noted.

Mr. MINICUS. We were just concluding, your Honor, the Government's comments on the defendant's documents addressed to illustrative illustrations of competition, and in drawing our comments on that particular part of this section to a close, I invite the Court's attention to Defendant's Exhibit 542, and you recollect that Mr. Gesell pointed out 542 as one of the extremely important documents in this section, and there was one part of the document that wasn't indicated by defense counsel's presentation. I am sure that is the result of a difference of interpretation. It may be that what appeared important to the Government
7900 did not appear important to the other side.

However, at the top of page 1002, the first paragraph, Mr. Yerkes there states, "There are a number of other more or less minor reasons set forth in this report which I do not consider of great importance, such as the extra sale of seconds, the combining of the various accounts, advertising allowances to American Chicle Company," and so forth and so on. "Certainly these are not of such importance as to warrant any change in our general sales policy or any attempt to meet these special conditions."

And then he goes on and says that the main thing they have to worry about is the superior performance of the Sylvania product.

Now, there you see Mr. Yerkes has singled out just about every one of these elements that Mr. Gesell has been talking about this morning in relation to these documents, and he says that he didn't think they were of very great importance.

Now, I would appreciate an opportunity of shifting our perspective for a moment to some of these documents in the section that I have just discussed with relation to other matters that we think are very probative of issues in this case.

Defendant's Exhibit 555 admitted in evidence this morning, among other things, announces the advent in August of 1941 of what has since become the chronic shortage of cello-
7901 phane in its markets.

The Government will prove that this situation is more severe today than it has ever been throughout the ten-year period of its existence. Now, on our case in chief we only brought the shortages situation down to 1947. Here we are four years later, and our proof will be designed to show that that, if anything, is more aggravated today than it was at the end of 1947.

In addition, in connection with this document 555, it is noteworthy that on October 1, 1941, the system of allocating shipments to customers was inaugurated. That has since, of course, become one of the accepted evils in this industry. However, contrary to

the statement appearing in 555, the Government's proof will show that the defendant's allocation system did not apply in equal degree to all of Du Pont's customers.

7902 It is noteworthy in this connection, that Defendant's Exhibit 558, three exhibits past 555, there is an emphasis on the fact of Sylvania's failure to favor the cigarette industry in its allocations.

Now, Defendant's counsel has made repeated references throughout the course of this trial, almost from the first day, and those references were all addressed to the superiority of Du Pont's cellophane in relation to Sylvania.

Now, there was a great deal of evidence on the Government's case in chief that we believe successfully rebutted that position, but we certainly found this morning a great deal of support in Defendant's own documents.

To borrow an expression from one of my associates yesterday, we can't blow hot and cold on this matter.

If Du Pont's position in this industry is attributed in large part to its research leading to a vastly superior product, their counsel cannot be heard to come in and say, when the situation changes in their documents, that some of the things that Sylvania was able to accomplish was because of better performance of their cellophane.

We do not think that there was a great deal of difference between the Du Pont product and the Sylvania product, and I do not think that they will produce many witnesses who will testify to that.

Certainly Defendant's Exhibits 539 at Page 997, and 543,

7903 at Page 1008, and 544, and 548, and 553, reveal the tests made in Du Pont's own laboratory indicating very little difference, if any, between the two products.

Another matter that was considered at some length in the Government's case in chief, it will be recalled, was the perverted use to which Sylvania's royalty statements were put by the Du Pont Company. Your Honor will probably recollect that under the guise of requiring sufficient information upon which to check Sylvania's royalties in connection with the moisture-proof license, Du Pont elicited trade information for the licensee which, because of the unique duopoly situation in this industry, it was able to analyze to acquire trade information which it could not lawfully have received directly from the other producer.

On the basis of the knowledge that was acquired, sales action was taken with regard to particular purchaser accounts.

Now, in Defendant's Exhibit 557 at Page 1073, the following statement appears:

"Competition: A careful study of all important accounts was

made as soon as the competitor's first quarter license payment was made."

The Defendant opened its defense with the subject matter that in their opinion it is extremely important to the ultimate issue of this case, that is, this question of substitute materials, and their position or lack of any position in the market place. We
7904 believe that the documents offered in evidence this morning are also extremely revealing in relation to this defense.

I turn my attention now to Defendant's Exhibits 560 and 563, which are certain reports bearing on what is claimed to be competitive aspects in the industry. These two exhibits contain such statements as the following:

"Goodyear, we have been informed by Strazzulla that his use of rubber bags for spinach was not entirely satisfactory, as he claimed the rubber bags had an odor."

2. "Celanese appears to be out of this picture due to the inability to seal their film with heat.

"Traver has been trying to get in the picture through the use of kerlon bags, but Dickman showed no interest due to poor visibility.

"Goodyear, nothing outstanding. They recently tried a test on a Model K Machine for Kiss Wrapping at L. R. Stone's. It failed—breaking on the stretch."

"4. Mission Pak of Los Angeles has ordered 5,000 pounds of rubber film to direct wrap citrus fruits for holiday baskets—supposedly because of the shortage of cellophane."

5. "Acetate Envelopes"—this is from the Celanese Corporation, "are being shipped to Manchester Hosiery Mills by Milprint. This is mainly because Milprint does not have enough cellophane."

7905 6. "Ideal Fruit & Produce, Syracuse, is using acetate bags on spinach. They prefer cellophane because of less breakage (the bags split) and lower prices."

7. "Foil: Due to cellophane shortage, Allen & Smith of Richmond has adopted printed foil bags for five cent salted peanuts. In addition to lack of visibility, another disadvantage is its sealing properties."

8. "Grocery Packing Corporation have eliminated their previous use of rubber because of difficulties of making into bags."

9. "Tru Value Foods who used about 2,000 pounds of rubber film rejected a further supply of the same amount because they did not like the film's cloudy appearance and other difficulties encountered in making into bags."

10. "John T. Troll Company has experienced so much trouble running foil on their F. A. Machine they have decided to discon-

tinue it on their five-cent carton and will adopt #300 MST-52 overwrap. We believe this was the best foil account here."

11. "Sam J. Regas, who formerly used Celanese acetate 150-pound weight bags supplied by Shellmar have decided against their further use because of 45 per cent breakage. And L. A. T.—" which is cellophane—"will be used hereafter."

7906 Now, whereas these reports, which, as Mr. Gesell described them, are concerned with the competitive aspects in various cities all over the country, whereas these reports emphasize certain basic defects in the materials discussed therein, that is not the most important fact to be derived from this evidence the defendant put in this morning. The defects are there, but there is another more important fact lurking in these reports. It will be observed that the materials considered in the reports all fall within the class of substitute materials known as non-fibrous films, just as cellophane is a non-fibrous film. In fact, of the approximately one hundred items, competitive items, discussed in these reports of 1946 and 1947, there is only a single brief reference to a material in the fibrous category, which class, of course, includes the glassines, the parchments, wax papers, and the other paper materials discussed earlier by counsel for the defendant at such great length. If the paper wrappers are competitive factors and are actually competing in the market with cellophane, is it not very strange that they were accorded less than 1% of the comment in a report of this nature.

Now, this distinction just pointed out between fibrous and non-fibrous materials which are alleged to exist competitively in the same market with cellophane will become increasingly important as the case develops, and for that reason the Court's atten-

7907 tion is respectfully invited to it at this time.

Turning from the question of illustrative incidents of so-called competition, Mr. Gesell discussed certain documents in connection with price. The documents in this section are apparently designed to present two alternative propositions: First, it seems to be defendant's contention that the prices quoted by Du Pont and Sylvania were not identical. Documents offered in support of this position include Defendant's Exhibit 567 through 570 and Defendant's Exhibit 591.

Then the second position appeared to be that regardless of the question of identical quotations, the prices actually charged and the market price were not the same.

Now, with regard to this proposition, the identity of price quotations, it must be first understood that the Government does not contend that from the period commencing June 1, 1947, and continuing to today, the present date, that Du Pont and Sylvania quoted the same prices for similar classes of cellophane. How-

ever, prior to the time when the influence of the present litigation was felt in the market, in other words, down through the years preceding 1947, an identity of price quotation between the two companies existed for each of the various classifications of cellophane which were manufactured in common. This was conclusively established in Government Exhibit 549.

7908 The defendant attempts to refute our position by pointing up an alleged divergence in policy between the two companies with regard to the cash discount. It is contended that prior to June 1, 1947, non-identity of price quotations resided in the 1% cash discount allowed by Sylvania for payments made within ten days of invoice and that Du Pont did not allow this 1% discount after 1941. In contra-distinction to this position the Government urges, with regard to the matter of cash discounts, clear and convincing proof of the price fixing which it is charged was carried on between Du Pont and Sylvania. Mr. Gesell thought this morning that this price fixing allegation of our case was completely exploded. We believe that it is still very much alive and very vital and nothing that any witness has said in this case has derogated from it one iota.

That yield is a vital factor in determination of prices is brought out by Defendant's Exhibits 568, 569, and 570. Therein there is extensive consideration of the amount of yield derived from a sheet of cellophane and the fact that that has an influence on the price policies in connection with that sheet.

Now, since these documents establish that yield is an important element of price, there already exists in this case definite proof of the exchange between Du Pont and Sylvania of future price information, and that is found in Government Exhibit 293.

7909 You may recall, your Honor, Government Exhibit 293 is a hand-written statement signed by the initials of Mr. Ed Lake, October 31, 1941. Mr. Lake was then addressing himself to Mr. Brown, who was General Sales Manager of the cellophane operations at that time, and this statement in Mr. Lake's handwriting very definitely says as follows:

"Little of Sylvania says that they are already producing 450 new gauge.

"It will be November 10 or perhaps a bit later before 300 production is on new gauge.

"Both rolls and sheets of old gauges will be invoiced at old prices until stock is cleaned out, and he estimates this will happen some time between November 15 and November 30."

Now, that was written on October 31, 1941. The Government's evidence establishes that on the very next day, November 1, 1941, a price change affecting both companies became effective and that

the only difference in these prices was the 1% cash discount which Du Pont had for the first time discontinued.

Now, if your Honor's attention can be invited to Defendant's Exhibit 591, put into evidence this morning, you will find there this comparison of Du Pont and Sylvania film prices from 1947 to 1950. You will note that under the price as stated for December 31, 1946, where any information is given, there is abso-
7910 lute price identity. That is particularly emphasized by the change that Mr. Gesell added this morning, because, even with respect to quantities less than 500 pounds, they are now admitted to be the same.

In some places there is the notation "No data." If you will notice, under "Converter Discount" it is shown that on December 31, 1946, Du Pont lists its converter discount at 10%, and opposite the Sylvania number or the Sylvania column they have "No data."

Then the very next price change, January 1, 1947, again we see that Du Pont dropped its converter discount to 7½%, and again for Sylvania there is the notation "No data."

Now, it is very strange that just two exhibits beyond this exhibit, in Defendant's Exhibit 593, your Honor will find a definite statement to the effect—on page 1132—this is a Du Pont report—"Discounts to converters"—"Both producers reduced converter discount from 10% to 7½%."

And at the top of the page it shows that that is in connection with this same price change of January 1, 1947. So I submit, your Honor, that in light of the defendant's own report only two exhibits beyond this one, that they did have information of Sylvania's converter discount on December 31, 1946, and January 1, 1947; that the exhibit be changed in that regard to show that there was a 10% discount for Sylvania as well as Du Pont and that on January 1, 1947, there was a 7½% discount for both companies.

7911 With that addition or change, we then have, for those dates in 1946 and 1947, absolute identity of prices for the two companies, except for one item, and that your Honor will find about midway down the page, which says, "Published Yield (square inches per pound for 300 PT and 300 P)". Then for the date of December 31, 1946, you will find that Du Pont's published yield was 23,400 square inches, whereas Sylvania's published yield was 23,000 square inches.

Now, there is a very slight difference there, just a matter of 400 square inches. However it is submitted that whereas on the price list, if you take into consideration this 1% cash discount which Sylvania allowed and Du Pont did not allow, and relate that to

the additional amount of yield that was developed by purchases of Du Pont product, you will see where you pay just a little bit more, you got just a little bit more, and I ask your Honor to consider that fact in connection with Government Exhibit 293 which I have just read to you.

Now, the defendant's second contention with regard to this matter of price, as derived from the documents put in evidence this morning, is that the prices charged by Sylvania and Du Pont for the same classes of cellophane were not actually the same, regardless of the quotation of identical prices. Attempts to support this proposition are found in Defendant's Exhibits 571 through 590, and the exhibits here discussed by Mr. Gesell
7912 this morning point up various practices alleged to have been engaged in by Sylvania as evidence that Sylvania sold at a lower price. In fact, it was rather interesting to find that Defendant's Exhibit 547, which was used to establish this fact, speaks of breaking the basic price schedule.

Now, what sort of a concept is this basic price schedule and what is Du Pont talking about in breaking it. Was there some sort of schedule between these two producers of this product that they considered basic and that they found offensive in the breaking thereof? Along that same line, in Defendant's Exhibit 579, there is a reference to certain practices as chiseling, which your Honor picked up for certain comment. Now, what is the connotation of chiseling? The dictionary defines it as a slang expression—to cheat.

I think that from that a question poses itself. How could Sylvania be cheating simply by charging a lower price, if they did, unless there was a basic price schedule understood between the two producers? One doesn't talk about another person chiseling on him unless they have an understanding about something. I submit that the true relationships are very often disclosed in unguarded utterances of this nature. People have a great many things on their mind they don't dare put down on paper, but it slips out once in a while in the way they express themselves, and this talk of a basic price schedule and chiseling I think is quite indicative when we have something as difficult to prove as price fixing is today.

7913 I would like to turn for a moment to a consideration of some of the specific Sylvania practices that the defendant has urged in support of its contention that the actual prices charged by the two manufacturers were not the same.

Now, split shipments again were urged as they were made by Sylvania, further showing that Sylvania departed from the quantity discount schedule set up by Du Pont——

Mr. GESELL. No, there was nothing of that sort said. It is the second time he has tried to put that into a different context than it is.

A split shipment is an order of less than case lots at case lot prices. It has nothing to do with quantity discounts.

He is attempting again and again to analogize it to cumulative quantity discounts, and there is no comparison whatsoever.

Mr. MINICUS. There are only two prices listed in the price list, your Honor, one was for over 500 pounds, and the other was for under 500 pounds.

Mr. GESELL. That is not the fact, your Honor. That is not the fact.

Mr. MINICUS. Your Honor has the price list before him, and I am sure that when the proper time comes you will scrutinize it and see just how the prices were charged.

Mr. GESELL. You will find that what I am talking
7914 about, your Honor, is, for example, in Exhibit No. 207, at Page 556 of the Government's proof.

The COURT. Is that GX?

Mr. GESELL. Yes, GX.

Mr. MINICUS. Whatever Mr. Gesell may call a split shipment, there is no doubt that for discount purposes certainly DuPont through a whole year's period would ship to any one of a number of plants owned by a single owner and add all those shipments up, and at the end of the year on the total basis of those shipments would figure a cumulative quantity discount. That is incontestable in the proof, and that is a violation of law.

Now, the second practice that was urged was that of combining sales of various classifications made to a single purchaser, again for discount purposes.

The Government evidence establishes in this regard that Du Pont followed an identical practice.

It will be recalled the evidence was gone into in great detail that at the end of each calendar year the entire sales for a purchaser under an agreement, regardless of the type of cellophane he bought, were totalled by the Defendant and the discount figured thereon.

I see no difference in the policy or the practice.

Then this was urged: That discounts were allowed on annual sales to customers totalling less than the $10,000
7915 threshold, which is adhered to by Du Pont. In other words, Du Pont's quantity discounts started at $10,000. These trade reports indicate that Sylvania is stated to have given discounts to a customer who purchased less than $10,000 in a year, and that is found to be evidence of actually charging a lesser price.

Now, inasmuch as cumulative discounts of that nature have pretty generally been condemned, this appears to be a kind of a plague on both your houses. However, and an even more pertinent rationale is quite obvious here, that is, that after Du Pont had skimmed off the top of the most important trade and left the less desirable customers for Sylvania, as a Du Pont document expressly said, it was necessary for Sylvania to cater to the smaller trade, the accounts of which on an annual basis were naturally below the average of Du Pont's very important trade.

Sylvania was just doing business in its little allotted sphere.

Here again, too, we were directed to this matter of second and third-grade material stated to be sold by Sylvania. I think the inference was sought to be established that Sylvania sold first-quality material as seconds, hence at a lower price than Du Pont's first-quality material.

However, not one of the documents in this group, all of which,
I regret to have to say again, your Honor, are of the hearsay
7916 trade report character, support such an inference. Not one
of them say that this material sold by Sylvania was anything but a second. There is no definite proof that Sylvania ever sold first-quality material as seconds. In fact, and I am very reluctant to have reference to one of these trade reports, but Defendant's Exhibit No. 581 is proof to the contrary. There, if your Honor remembers the document, the Du Pont salesman was calling on a fellow who was wrapping his candles in cellophane. And in reporting back to his superiors, he told how he told this man that this stuff he was getting was not fit for wrapping candles in, that he should have nothing but the first-grade Sylvania stuff. So he must have been getting seconds, if it wasn't fit.

He talks about the grain being wrong in the Sylvania product, so it must have been a second.

And then all of these documents, the salesmen admit what they are talking about is second-quality material. There is one document that shows that "Our seconds are a little bit worse than Sylvania's seconds." I guess that can happen.

Now, before leaving these documents, which the Defendant has offered in support of price competition, and again I regret the necessity of pointing up the evidentiary character of the documents, it will be observed that the group of Defendant's documents,
exhibits 571 through 590, comprise entirely these ubiquitous
7917 reports with their never ending statements of opinion, hearsay, and sheer market gossip.

In the instant situation, however, these defects in this type of evidence is aggravated by the fact that the subject matter is devoted entirely to trading practices in the market place. The ele-

ment which we are interested in here is price, and more particularly, the price which Sylvania was charging for its cellophane.

The Defendant here attempts to attribute to Sylvania a price entirely different from that stated in their published prices. In order to accomplish this purpose, the Court has been presented with a series of statements which are little else than double hearsay. What happens? What is the factual background of these things?

A Du Pont salesman calls on a prospect, and in the normal trading discourse which follows, the prospective buyer may have stated that he can make a better deal with Sylvania.

Here is a fellow about to be sold something. He wants the lowest price he can get. I think anybody trades that way. So he says, "Well, your price is such and such. I can do better with Sylvania."

In any event, the salesman doesn't make the sale. So he reports back to his superiors that his customer said that somebody else said that Sylvania offered more advantageous terms.

7918 Now, if that is evidence, your Honor, just let us consider the customer who might walk into Macy's Store. He sees a coffee pot he wants to bu and it is $10.95, and he says to the Macy salesman, "I can get it for $9.95 across the street."

If Gimbel's is going to be held in evidence every time that kind of trading goes on, we are going to have chaos in the market place.

Whatever these documents may have been offered for, their probative value with regard to Sylvania's prices is absolutely nil.

Now, the Government isn't going to object to the admissibility of these documents. We prefer to have them on the record as the very best evidence which the Defendant has been able to produce so far in its feeble attempts to refute the Government's documentary proof, and our proof was comprised of admissions of the Defendant Company's published price lists and official statements.

Mr. GESELL. If your Honor please, I cannot conceive of a more serious distortion of the proof than you have been listening to for the last hour and a half, and I say that advisedly. What is the proof on price fixing here. Two witnesses were called by the Plaintiff, Mr. Hamburg and Mr. Replogle, both in the sales department of the American Viscose. Both of them testified

7919 in detail as to how they fixed the prices, of the scurrying around in the market place after they got a copy of the Du Pont price list, and back dating it.

And he says there is not a scintilla of proof in the evidence to rebut their price arguments.

Mr. MINICUS. Mr. Gesell hasn't pointed out Mr. Replogle's statement on cross examination in reference to prices that were

not published; in answer to Mr. McGlothlin, Mr. Replogle said "Anytime I want to find out anything, I call J. E. Hatt of the Sylvania Company." That is in the record

Mr. GESELL. Not at all.

Mr. MINICUS. That is certainly in the record—of the Du Pont Company, Mr. J. E. Hatt of the Du Pont Company, your Honor.

Mr. GESELL. Now, your Honor, if I may take up each of these statements, I am going to see if I can't in some kind of an organized way—if the chattering will stop—discuss it.

Now, the first statement that was made four times to the Court was that all of the big accounts got quantity discounts, and the little follows didn't.

Government Exhibit 5020 through 5023 shows that not to be the case. It shows that Du Pont had 306 quantity discounts, of which 253 out of the 306 were paid to customers buying less than
7920 $50,000 a year. So the statement repeatedly made that the discounts were paid to the big customers, the important trade, is false, on the Government's own exhibit.

Now, the next thing that was said, and this was said twice, that Quality Bakers was a fine, upstanding cooperative organization of little bakers seeking to struggle against this great Du Pont monopoly.

I refer your Honor to the Federal Trade Commission ——

Mr. MINICUS. I ask that the words "upstanding and "fine corporation" be stricken, your Honor. I never qualified any opinion about Quality Bakers. I said simply they were a cooperative of small bakers.

Mr. GESELL. I call the attention of the Court to Federal Trade Commission decisions 29–F. T. C.–1328, in the matter of Quality Bakers of America, et al., which I cite to the Court, and which says that this organization at that time was illegal in its operations and composed of numerous very large baking concerns.

Mr. MINICUS. I think that this is completely irrelevant, unless there is a showing that that has some connection with cellophane.

At about the same time or very much earlier, the Du Pont Company was engaged with the American Viscose Company before the Federal Trade Commission for price fixing.

Mr. GESELL. Now, the next thing, your Honor, which I
7921 want to call attention to, are the statements about the market, which were directed to Exhibits 562 and 563. It was stated that first of all those dealt only with non-fibrous materials, which is not the fact, because they deal with foil and paper as well.

And second, it was a carefully selected group of excerpts showing the difficulty these materials were having. Some of them

in the market were read, but there were others which were not read to the court in the same exhibits that show they were being successful.

"Rubber is being tested on large cuts in A & P Detroit meat program in an effort to eliminate breakage."

"Goodyear have increased their sales force in New York by the appointment of a Mr. Magnuson."

"Alaska Salmon Filet Company in Oakland used about 400,000 pounds per year of this film," better than cellophane. And what you get out of these documents again is the recognition of the quality competition and the other competition between the materials.

Now, it was stated that there was no proof in the record that these seconds weren't seconds. I cite 574 as an example. It was stated that cumulative quantity discounts were in violation of the law, and he is talking about documents written in 1931, before the Robinson-Patman Act was passed.

But overlooking that, there have been recent decisions of
7922 the Federal Trade Commission, and as recently as the last year, a decision by the Fifth Circuit in American Can Company versus Russellville Canning Company, upholding cumulative quantity discounts even in this day and age in the development of that act.

Where does the assertion come from that it is illegal to have cumulative annual quantity discounts?

Now, there was a discussion of allocation relating to exhibits 555 and 556. And we now have Mr. Minicus' interpretation of L-20, which the first time it came up in this courtroom in the defense, he said he never heard of it. Now they have another theory about L-20, and they have misapplied it again.

Du Pont cut back more than Sylvania at that time because it was making more plain than Sylvania was making of plain cellophane, and, therefore, the order affected its operations more seriously than it affected Sylvania's operations. And it was presented as though Du Pont were seeking to create an artificial shortage.

The records show that both companies cut down because of that order.

Now, as to the advertising allowance, it was stated that Du Pont didn't pay advertising allowances to regular converters. And then when I called attention to the exhibit that shows the payment to a regular converter, Mr. Minicus informed us that some of his staff has said that is the only instance I could point to.

7923. Well, the exhibits show that the contract with the regular converters and the contract with the other converters, the promotional converters, both contain a provision allowing for the

advertising allowance, and that no distinction was made in those contracts. Both were entitled to an advertising allowance.

Exhibit 541 at Page 6345 shows the advertising allowance identical for both promotional and regular converters. And 5545 shows the payment.

Now, there was talk about chronic shortages becoming more severe, and that allocation being an accepted evil in the trade. The most important factor in the development of the shortages today is this lawsuit, which has placed an artificial damper upon the growth and development of Du Pont's cellophane business. And the next documents we are coming to will show that.

The statement was made that in the war time Du Pont did not apply its allocation system fairly because it favored the cigarette companies. Mr. Minicus fails to tell you that the War Production Board after exhaustive studies of that problem, gave the cigarette companies the choice of carrying foil or cellophane on their packages, and foil was eliminated and cellophane was carried. And it went to the troops in cellophane. And DuPont had an obligation
to those companies by giving them a moisture-proof wrap-
7924 ping material. And that is presented to you as an arbitrary example of discrimination on the part of DuPont.

Now, there was a statement made that there had been a perverted use of royalty statements. And again he thinks this word "Competition" has something sinister about it. We charged a royalty, and when they paid the royalty, that royalty revealed what their sales were, because it was based on sales, as most royalties are. And so we analyzed that, and that is presented as something sinister, perverting the use of royalty statements, in the guise of royalty statements, unlawful trade information illegally received.

Now, there isn't a scintilla of evidence of illegality or impropriety in charging a man a royalty based on his sales, and then computing to see what his sales were.

These references of a broad sweeping nature to the existence of a reference which isn't in the record can be brought down to concrete instances whenever the statements get particularized the way they were today.

Now, isn't the extraordinary thing about the comments which we have had this very simple fact: That the Government now concedes there wasn't price rigidity, and it has nothing to say about the fact that there was competition? They do not deny competition. The discussions are directed to explaining why it
existed. Sylvania had to compete in order to get some
7925 business, but there is no discussion to the Court of the significance of the competition, and no explanation to the Court as to how, in the light of this competition, they can reiterate

and reiterate in these theoretically abstract statements that Du Pont has a policy that has suppressed competition, and that everyone is dependent upon Du Pont for their products; that we have restrained competition; that we have exercised price control to stifle competition; we have beset Sylvania with oppressive tactics. No explanation of what they are talking about, and no explanation of how this competitive proof jibes with their theory of the case and these assertions.

Now, I want to turn to the next section of the documents, your Honor, which relates to the competitive reports.

I wish to offer Exhibits 592 to 596, inclusive. We are not offering 597.

(Defendant's Exhibits 592 to 596, inclusive, were received in evidence.)

Mr. GESELL. What we have done here is to take these competitive reports which were submitted for prior years in the Government's case, and brought them up to date, running them on through to 1949. There is one on which Mr. Minicus places particular reliance, which I will want to discuss.

The COURT. Reliance or objection?

7926 Mr. GESELL. Reliance. He has already read it to the Court and discussed it in argument. That is the document on which, your Honor, he says that he has concrete proof that we have been bilking somebody.

Let us take them up in order. First Exhibit 592, which is the second quarter report for 1946. That appears at 1129. There is a reference at the bottom of the first page to price developments of wax paper, cellophane, bleached sulphite, glassine wrapping papers, to which I direct your Honor's attention on 1129, and then a report of various foreign concerns active in the cellophane business, Page 1130.

This, of course, ties in with our assertion that there were producers abroad not comprehended within the Government's notions of what was the cartel. You will see there that a number of European manufacturers who were not, of course, related to the cartel, a Swiss company, a Swedish company, a British company, and a company in Brazil. Then you will see the reference to the inability to have full competition during the allocation period, on 1131.

And a reference at 1132 to Sylvania's increase of prices with Du Pont maintaining the price that it had.

On 1133 there is some discussion of exports showing D. C. I. getting into the export trade, and the fact that there is a shortage abroad of cellophane.

A further reference to various foreign manufacturers at 1134.

7927 And then discussion of Celanese and Eastman increasing production as you approach this post-war period, and their interest in the fresh produce market.

7928 There is a reference to pliofilm at 1135, showing that Government restrictions on the use of pliofilm have been removed and it is now starting to be marketed, but that Goodyear's present production, of course, is very small, 150,000 pounds monthly, shown at the top of 1136, and Goodyear has had to increase its pliofilm prices until they are about double what cellophane was.

It says they continued to make some progress in the field of meat and poultry, largely because there is a shortage of cellophane.

You will see that they like Du Pont at this early stage with pliofilm are trying to take advantage of shortage of capacity, working with the cigarette companies, and getting work on the packaging machine problem.

Aluminum foil is shown on page 1137 to be active, working with various kinds of laminates, particularly in the cigarette field, but we will see shortly that they didn't come to much. You will recall we had other documents about that, but they are working on an intensive advertising and promotion job to build up business in the cigarette field.

And then there is reference to the fact that aluminum foil is being used in frozen foods, candy, potato chips, and butter, and bread wraps, and so forth.

Polythene—of course, non-packaging uses are reported as accounting for the major share of polythene production.

7929 Polythene is also in a very early stage. You might be interested to notice the Harwid Company there as one of the producers as polythene just gets started. Harwid has since been acquired by Ecusta Paper Company, which they have added to their organization, which is building up a position in this flexible packaging market.

Then, over—we have the report for the second quarter of 1948 in 594. It says, "Sylvania's higher prices continued to meet with resistance in the trade and reports are that they were obliged to discontinue allocations and resort to an active selling campaign"—showing that even the small differences in price, which Mr. Minicus was trying to minimize a moment ago, apparently had some trade consequence.

With reference to the continued exporting of films by Great Britain, on the next page——

The COURT. What page is that?

Mr. GESELL. 1140.

The COURT. Before you pass that, whatever happened to the

story that appeared in the New York Herald Tribune, that paragraph at the bottom.

Mr. GESELL. Of 1140?

The COURT. Yes.

Mr. GESELL. I don't know the answer to that, your Honor. Does anybody back there know it?

7930 (No response.)

Mr. GESELL. I know that about that time Courtaulds came along. They are building a cellophane plant in Canada. I don't know about this cellophane plant in Egypt. I will try to find out.

The COURT. It was just in passing.

Mr. GESELL. Over on 1141 you will see that Reynolds Metals promotion in the food markets haven't had any significant developments worth reporting, and they haven't been very successful with their glassine foil cigarette package. Your Honor will recall we had documents of that, and, of course, it didn't stay on the package long and didn't come to much.

Pliofilm has doubled since the year before, so it is beginning to get some capacity, but it is not a very important factor, of course.

"Goodyear is now offering the trade a rebate plan to offset the cost of machine parts and installation charges to convert packaging machines to handle pliofilm."

This high-priced specialty of limited utility is beginning to follow much the same pattern as cellophane did in entering this field many years ago. They have a quantity discount plan, you will notice.

Polythene is still only about 25% for packaging uses, but they are shown to still be in the market.

7931 Saran of Dow, on 1143, is one of these other new films that has come along, and they have announced a price reduction, but, of course, they are of practically no consequence even today.

Over on 1145 there is another reference to foil in connection with the problems of caps and bands. I am not going to stop to discuss those now, because we will deal with the problem of other materials there when we come to that phase of the case.

Now, here is a document, your Honor, which I wish to spend some time on. This is 595. Mr. Minicus read this document and wrung all the changes on it back and forth at the time of the argument on the marketing issues in the case at page 4108 of the transcript, and he said that this document showed that my arguments that I was advancing were all false and deceiving that anyone who read this would find out that our talk about competition wasn't true; and I think he got into difficulty about it, because at that time he failed to recognize the enormous importance in the flexible packaging market of wax paper and glassine and chose

to take this report, which is quite negative in discussing these new post-war films of various kinds, and sought to build that up as though that was the group of materials that we are talking about.

Well, now, of course, the case is in on that. It is perfectly clear that these various films, like polythene and Saran and items
7932 of that kind account for only 2% of the flexible packaging materials that were shown in Mr. Bricker's schedule—I think under 2%—and that the same time that this document was being written in the form of a report of the new developments in these particular transparent films, we of course have other documents showing the competition that was taking place, not only with these films, but the strenuous competition that was coming along and continuing with respect to wax paper and glassine.

I don't intend to read all of those documents or even refer to them to the Court, but there is one which I think is significant to tie in with this particular document. It is written June 22, 1948, and it is our Exhibit 375. When we came to this in the discussion of the market, I didn't discuss it but reserved it for discussion here. This is a document in June of 1948, which, of course, is mid-point at the time this competitive report was written, going out in the form of a general bulletin to the trade, announcing a Du Pont price increase for cellophane. You will find that at page 704 of Volume 3, and there we have a very detailed statement by Mr. Brown of the factors underlying the cellophane increase, pointing out that really it is very small in relation to the other inflationary trends, and he says at the bottom of 704:

"The price advances on cellophane are, of course, still substantially less than those of its principal competitive products—
7933 waxed paper, glassine and box board." He says we are attaching revised bulletins on the various competitive prices.

And then if you will follow along, your Honor, over to page 708 of Exhibit 378, which was one of the attachments, you will see, first of all, the picture of the price increases of the other principal packaging materials compared with their pre-war figure, and there he takes sulphite, wax paper, glassine, and gives the salesmen the material for showing these various items have had a percentage of increase greater than cellophane in coming out of the war.

These are items which he says are the principal competitive products, and then on the next page, in Exhibit 379, you see the computations made as between the price of cellophane on the new basis and the price of wax paper in terms of the cost of wrapping 100 loaves of bread, cellophane showing more expensive than wax paper, with a difference of a little over 23¢ per hundred loaves. So at the same time that this report is being written we do have

the salesmen being informed of the price situation as to the main competitors, wax paper and glassine.

And now, against that preamble, and recognizing that both the reports before and after this discuss these other materials, such as foil, let me run down some of these statements on which Mr. Minicus takes such great satisfaction, and let us see if we
7934 can see what they really mean in terms of proof as a whole in the case.

First of all is the statement on page 1147, "The principal markets for non-viscose films have been competitive with cellophane only to a very minor degree up to this time." You will see that he is talking about polythene, various vinyl films that we haven't discussed in this case, pliofilm, which a moment ago we saw was just coming out of war-time limitations, and a very new film, a cellulose acetate, which had limited use in the fresh produce field, these all accounting for about 2% of the total.

It says, "Some are used very little or not at all in the packaging field"—I think some of the vinyls are used not at all, and we have seen that polythene, for example, was only used about 25%. "Others are employed principally for specialty uses where cellophane is not well adapted. None have been successfully introduced into any of cellophane's main markets"—that is the food markets, I believe they are talking about, and the cigarette market—"due to their inherent shortcomings"—of the various materials, and, of course, they are all, as our chart showed, sold at higher prices.

It says that taking that group as a group, Du Pont's share has been steadily increased. That is on page 1148. And then we got over into a discussion of the various particular items, starting, I think your Honor will find, with cellulose acetate at the
7935 bottom of page 1152 and going on through to the end of the report.

As far as acetate is concerned, the report shows that the demand has exceeded the supply and that about 20 to 25% of its production—this is at 1152—is sold for uses competitive with cellophane. The great volume of it is used for laminating, with foil and paper; a substantial portion of it is also used in packing.

It says that Celanese has recently increased their capacity and are making an active drive for direct packaging uses, so far with little success, principally fresh meat and produce.

We had some examples, your Honor, of particular success of cellulose acetate at this time in 1948, in Exhibits 139, 140, and 144. We have evidence that the acetate succeeded in taking business from cellophane on fresh produce, but as this report says, so far they haven't had much success.

These are examples of loss of business amounting to rather substantial amounts, in Exhibit 597.

Then as to pliofilm, it is still getting under way and hasn't hit its big market in the *fresh produce at this time and in the meats.* They say it is principally a packaging film, which, I guess, there is no dispute about, but they say that as an active competitor of cellophane it is only in those fringe uses bordering markets that need greater moistureproof protection than cellophane pro-
7936 vides. They also say that the packaging of produce in that is still dominated by cellophane.

There are, however, indications that Goodyear is really getting along. They doubled their sales in 1948, from 2 million, five to 5 million, most of which was used for food packaging; and then, your Honor, if we recall the other exhibits in the case concerned with pliofilm, we see that it was able to achieve a business position in spite of its higher price, which is mentioned on the next page and is shown in our charts. It gained business in this 1948 and 1949 period in a large number of instances.

Exhibit 103 shows a candy case; 104 a candy case; 166 a dried fruit case; 167 a dried fruit case; 168 a dried fruit account; 172, fresh meat and cheese; 173, cheese; 176, fish; 209, cigars; 210, plain pipe tobacco; 216 textiles; and 217 textiles; and a slide fastener in 229 wrapped in pliofilm, so that although it is still higher priced, and although it has been mostly in the fringe markets, it has begun to make some headway, as these exhibits show, and, in fact, as the subsequent exhibits show, and the testimony will show it is now probably in the field of meat packaging the dominant material.

Now, as to polythene, we see again that it still is to a substantial degree not in the packaging field. There are reports there that polythene has area advantages per pound over cellophane, and it is coupled with the possibility of reduced prices as the in-
7937 dustry expands and makes it a potential competitor with cellophane on an area basis, but it is very doubtful that equivalent thicknesses can be used. The report says on 1155 that the extent to which polythene will compete with cellophane depends primarily on whether or not changes and improvements in its present basic characteristics can be made.

And over on the top of the page they say, "* * * its penetration into cellophane markets is not expected to any major degree."

I am not going to discuss Vinyl-Buna because that is a Goodrich film. There is a slight reference to it there being used on oleomargarine. Goodrich and Union Carbide were working together on it.

Cry-O-Vac, that very minor product, it says was still in small quantities used for packaging frozen poultry, which I think the

facts will show is still the main market for Cry-O-Vac, and we only had one exhibit on that, 129, showing at this time it was getting business on frozen turkey.

Saran, they of course say, is superior in moisture protection, but also of course point out that it has no significant commercial uses, having been developed, due to its high price. It is one of these post-war wonders that are coming in, and it still have to go through this price lowering procedure before it can come into the packaging market as a full competitor. We do have a few instances of Saran in the documents, mostly, I believe, additions, rather than cases of loss of business.

7938

There is quite a good deal of discussion of vinyl films. You will see the list of producers over on page 1157. The quantities are of course small, and they don't appear in our selected group of materials.

Polystyrene is also mentioned.

There is again in this report a full discussion of the cap and band situation, which I will not discuss at this time.

596 is the report for 1949, which comes on and ends this series. He talks about various transparent films being in free supply from about the first of March to the first of September, which is the period that is a subject of some discussion, I think, with Mr. Bricker, as to whether it started in March, whether it started in January.

There is some analysis of the sales of the different films, analysis of cellophane sales, discussion of Sylvania's prices, over on 1169, estimates of the market.

There is one interesting reference at the bottom of 1169, your Honor. A British film manufacturer has set up an agency in New York City which has solicited important accounts, and a reference to the continuation of the tariff ad valorem value of 45%. There is a discussion of the development of the distribution of cellophane, and a study there mentioned on page 1170 of the current changing potential for transparent sheetings; and if you turn, your Honor, to the very last sheet of this exhibit at page 1182, you will see a graph there showing the extent to which cellophane is believed to have met the potential of sales in these various specific end uses, and you will see there a chart which rather closely approximates some of the results of the studies that were made through the converter study.

7939

Mr. MINICUS. I object to that, your Honor.

Mr. GESELL. A very substantial amount——

The COURT. Just a minute. Finish your sentence.

Mr. GESELL. A very substantial amount of business in these various end uses not being satisfied by cellophane.

The COURT. Now, Mr. Minicus.

Mr. MINICUS. Now, Mr. Gesell has pointed to this chart on the last page of 596, and he has related information on this chart in 596 to the converter study. I point out to your Honor, and he has stated here today, that the converter study included waxed papers, glassine, sulphite papers, and many others of the fibrous groups. I call your Honor's attention respectfully to the top heading of this chart, where it says, "Du Pont Plus Sylvania Against the Transparent Sheeting Packaging Potential," and I maintain that when Du Pont is talking about the transparent sheeting packaging potential, they are not including the fibrous papers but are limiting themselves to the transparent foils.

7940 Mr. GESELL. You maintain that, but it is not the fact; it is not the fact.

Mr. MINICUS. I will now, your Honor, in answer to that, point out to you, on the first page of 595, which was just read, on the first line, "The transparent film industry," then at the bottom of the page, "A comparison of estimated sales of principal transparent films now in commercial production is given," and for this transparent film industry the defendant, in its own report li ts Viscose, Cellulose Acetate, Pliofilm, Polythene, Vinyl-Buna, and Vinylidene-Chloride and Vinyl Chloride.

Now, these are the members of the class that the defendants themselves in this report, which is of the same nature as the report under consideration, list in that group of transparent film, and the wax papers and glassines are not referred to.

Mr. GESELL. He is just wrong, your Honor, just as wrong as night is different from day. This is a study of packaging potential, and in determining the potential, the study is made of the total available market, without regard to what the wrap is, and there isn't any basis for saying that this is talking about transparent films when it is talking about the potential.

Why, there isn't anything wrong. All you have to do is look at the bread and cake, where the bulk of the busi-

7941 ness, we all know from our common experience, is not in the transparent field but is in the field of wax paper and glassines.

Mr. MINICUS. I submit, your honor, that the chart itself says, "transparent sheeting packaging potential."

Mr. GESELL. And you were very careful not to point out that it doesn't say "transparent film."

Your Honor appreciates that both the wax papers and the glassine are transparent.

The COURT. There is an interesting diagram on the item of cigarettes, isn't there?

Mr. GESELL. Yes.

The COURT. As I understand it, the country has absorbed the potential in smoking cigarettes?

Mr. GESELL. No, I think that means of all the cigarette packages, cellophane has 100 per cent of the business.

The COURT. Is that what that means?

Mr. GESELL. Yes. Not that there won't be more cigarettes, but of the available material to be wrapped at this time, all the cigarettes are wrapped that can be wrapped in cellophane. They do not think that they can take the cigarettes in boxes, some of these special ones, like Parliament, and pull them over to cellophane. They have got the business they can get in the cigarette field.

7942 These estimates and discussion of the other films continue. References show the growth of position on the part of some of these films; mostly it is minor, although pliofilm again is shown to have doubled sales over the previous years, doubling twice in two years, Page 1173.

And there is a little more reference to its getting a position on some of the products.

Saran, of course, is still extremely small. And then you will see it goes on and discusses wax paper and glassine, at Page 1176 as the principal competitors of cellophane in the packaging field selling at substantially lower prices; an analysis of the area basis is contained there, a study of the relative prices and the quantities of production of these different films, and the discussion, you will note, at the bottom of 1176 of the development of Marathon's Tyton wrap and Kalamazoo Kalakote, about which we saw from many other documents took an enormous cut in the business at this time for certain uses. And the rest of the report again turns to discuss sponges and yarn and caps and bands.

I haven't offered Exhibit 597, so that completes the group.

Mr. MINICUS. Before starting, your Honor, I would like to have an opportunity to reiterate my statement that those reports that I mentioned before, and they are before the Court and

7943 they can be added up, contain one reference to any fibrous material, one reference out of approximately 100.

Mr. GESELL. We would like to have some sort of definition of the fibrous film market, whenever he wants to give it to us.

Mr. MINICUS. The fibrous film market is any paper market. Anyone knows that. You can just tear a little piece of paper and you can see the fibers in it.

A foil is not a fibrous product, nor are these films that are extruded, such as cellophane, polythene, and the other transparent films.

Mr. GESELL. Is he now saying we monopolize the transparent

film market, your Honor? Is he shifting his position? If so, I want to know about it.

Mr. MINICUS. We might have had a little difficulty, your Honor, until Mr. Gesell just conceded that the transparent field market was inconsequential. He said it amounted to about 2 percent.

Mr. GESELL. What is he saying about it?

The COURT. I don't know. I am in an utter state of confusion.

Mr. GESELL. I am, too, your Honor.

The COURT. Suppose you go ahead and proceed with your comments.

Mr. MINICUS. Thank you, sir.

Now, a great deal of what I would have said about
7944 these competitive reports has already been said, and I will try to cover the material hurriedly so that we can finish this matter before the close of the day.

Defendant's Exhibit 592, I just would like to pause on that for a moment to show that on Page 1, in 1946, the shortages have continued, and I believe that has been covered.

Then 593 is entitled "Cellophane Competitive Report for 1946." I would not like to have that confused with Government Exhibit No. 88, which is the annual competitive report for the year 1946. I do not know what this is. Possibly it is a worksheet that was used in making the other one.

The COURT. Give me the GX again.

Mr. MINICUS. GX-88, as compared with DX-593. In the GX-88, we get a further consideration of this shortage problem, and show that there is a statement there to the effect that it looks as though the shortages are going to be with us for a long time. And then it goes on and considers the effect of the shortages on this substitute problem.

On Page 2 it says that "Non-cellulosic films partly stimulated by special war applications and now greatly encouraged by the severe under supply of cellophane have recently shown an increased rate of activity."

In considering this matter of substitute materials, your Honor,
7945 we simply can't overlook the impact of this short market, which we intend to develop to a high degree in DX-593 which the Defendant has just offered.

There is considerable detail on this shortage problem, and the only reason given on Page 1 of that report for this shortage is the inadequacy of productive facilities. There is no mention here of raw materials being unavailable or anything else, and this is written in 1947 to cover the end of 1946.

Now, there has been a new idea interjected into the case today, your Honor, and that is the fault of the Government. Now it is

our fault. First it was the orders before the war, and then it was the war, and then it was the postwar, and now it is the Government's fault.

Now, all of those things may be true. I do not know. My thesis is only this, that anytime any extrinsic circumstance, be it a suit by the Government, be it a miscalculation in the company's own estimate of the market, be it a certain Government order, can so affect the availability of that product to the public that for 10 years there isn't nearly enough to supply the demand, then the very evils of monopoly which the Sherman Act is aimed at have been brought to full fruition.

There were lots of shortages in the war, a great many of them, but I do not think we find many of them persisting today and have persisted steadily and constantly since 1941. That is the fruit of monopoly.

Now, Government Exhibit 595 has been pretty well cov-
7946 ered already. I do want to again draw attention to the fact that it is very apparent on this report that in the market, other than the one—the ones that have been interjected into this case, we talk about the pre-packaging retail market, and then there is this flexible transparent packaging market, and here is a transparent film market. Now, we are going to have to decide on one of these markets some day. But there are more than one. And each one of them has a different meaning. And the Government intends that before the case be ended, that it will bring fully to your Honor a consideration of all these markets for your determination, about which one cellophane belongs in.

However, this transparent film market, whatever that is, is pretty well identified, at least it is constant——

Mr. GESELL. That is a very significant statement, that cellophane isn't considered in a market by itself. We at least have got that far along.

Mr. MINICUS. I do not remember saying that statement. I said we will find out which market cellophane is in. We have a cellophane market, and maybe it is in that one. It is a possibility.

Now again there is a discussion of the shortages, and they say they are still far from being satisfied. In fact, on this page, Page 2 of 595, there is an indication that probably four years after the war the producer, which purposefully had maintained its dominance, is still unable to supply the market.

7947 There is a matter of great importance on page 1151 of this exhibit, your Honor, that was not called to your attention. I read the third full paragraph on the page:

"Sales increases have been confined to our moistureproof films"—there we have this problem, then, of moistureproof again going along way ahead of plain cellophane. "Sales of non-mois-

tureproof grades have actually decreased (from 26 million in 1941 to about 20 million in 1948) and from 25% of total to about 12%."

Now, Mr. Gesell has been urging that. He says that shows how important this moistureproof material is.

The next statement, "This pattern has been purposely changed since the war due to the greater potential, more satisfactory performance, greater return on investment and larger possible production inherent in moistureproof types. Policy has been to coat all production possible."

There we could not have it any plainer. Up until now we have had to infer from bits here and there, but here is the statement that the pattern has been purposely changed. Who but a monopolist has that kind of control of quality of the material that enters the market?

Mr. GESELL. Your Government Exhibit 530 shows Sylvania did the same thing. I didn't know that they were being charged with monopoly.

Mr. MINICUS. Did they?

7948 Mr. GESELL. I am just answering your rhetorical question.

Mr. MINICUS. Then we come finally to this Defendant's Exhibit 596, and in 596 we find a statement on page 10 which I particularly would like to have your Honor peruse under "Waxed Paper."

"Waxpaper and glassine are the principal competitors of cellophane in the packaging field, selling at substantially lower prices. For example, on an area basis, unprinted wax paper sells for 45% less than unprinted cellophane," and so forth. But there is the statement that wax paper and glassine are the principal competitors of cellophane in packaging food. That statement is made April 7, 1950, in an annual market survey. This annual market survey is the report that superseded an old competitive report. Now, of all the Du Pont documents that have become involved in this case none contains a statement comparable to that in a report of this nature. There are bulletins and things like that that went out to salesmen we just saw in 1949, I believe. There is now in evidence, however, a series of annual competitive reports dating back twenty-five years, and in no one of these prior to 1950 can there be found an expression of the competitive influences exerted by wax paper and glassine upon the market for cellophane. Nevertheless, in the year 1950, someone in the Du Pont Company discovered for the first time for the purposes of a

7949 competitive report that wax paper and glassine are principal competitors of cellophane. I reiterate my statement that these products in each of the preceding annual reports did not even receive passing notice as a competitor of cellophane until 1950. In support of this observation I intend to read into the

record excerpts from a few of the earlier competitive reports, and I assure your Honor these were selected at random.

Mr. GESELL. Let us see if he starts with 392, which the——

Mr. MINICUS. Can't we have a little bit of formality? I will select my documents and you select yours. This must hurt. You are making a lot of noise today.

Mr. GESELL. Let us see if he starts with 392, your Honor.

Mr. MINICUS. In the first place, your Honor, 392 is not a competitive report and we have covered 392 thoroughly. I am not starting with 392.

Government Exhibit 430, that is a competitive report, your Honor, for May 1928. On the first page of that report:

"In an endeavor to show the activity of our competitors, we have listed all accounts whom we have signaled as using competitive material. By competitors we mean those concerns who are selling imported transparent cellulose sheeting:—namely, Birn & Wachenheim, Henle, and Bendix."

Here is a definite statement in a competitive report
7950 in 1928. They point out who are their competitors and they say they are the importers of cellophane.

Then in a competitive report, Government Exhibit 436 for 1930, this is immediately, your Honor, after the advent of Sylvania, and Sylvania is therein designated as the sole competitor. No mention is made in this entire report of competitive influences of any of the fibrous papers, and there it is right on page 1 of this competitive report for the year 1930.

"Sales by the Sylvania Industrial Corporation"—the sole competitor in 1930—"are estimated to have been 440,000 pounds."

Now, there was plenty of wax paper on the market. As Mr. Gesell said, wax paper was mentioned in Government Exhibit 392 and there was plenty of glassine on the market. They were both in the market before cellophane's advent in 1923, but in 1928 and in 1930 the competitors were the importers of cellophane and the Sylvania Corporation, and no mention of the fibrous products.

Again in Government Exhibit 443 on page 16, here now we have a lengthy discussion of the relationship between Du Pont and Sylvania——

The COURT. We will have to take it up next week. I am going to recess now.

Mr. MINICUS. Thank you, sir.

7951 The COURT. We will recess this case until November 7 at 10:30 o'clock in the morning.

(At this point the trial was adjourned to Wednesday, November 7, 1951, at 10:30 o'clock, a. m.

* * * * * *

7953 WEDNESDAY, NOVEMBER 7, 1951, 10:30 O'CLOCK, A. M.

Present: As before noted.

Mr. MINICUS. Your Honor will recall that we were discussing a statement contained in Defendant's Exhibit 596, to the effect that wax paper and glassine were the most important competitors of the product cellophane.

Now, from that statement and the discussion emanating, there arose a certain amount of confusion concerning the categories into which these products fell, and their nature.

I would like to stop for a minute at this point and consider certain of these materials so that we all understand exactly what is being talked about. In the Defendant's proffer of proof made last June, there was at that time incorporated certain materials of the nature that are presently under discussion.

The COURT. Is that an exhibit?

Mr. MINICUS. This is not an exhibit. It is the proffer of proof, your Honor.

Now, turning to Page 14 and certain appendices to Page 14 running through the letter L, we find these materials set forth:

At 14–L there is the material wax paper, one of
7954 those spoken of in Defendant's Exhibit 596.

Now, we mentioned last Friday afternon that wax paper is one of the materials belonging to the genus of the fibrous group. And this can be readily ascertained if one just takes a corner of that wax paper appearing there and tears it——

The COURT. What page is that?

Mr. MINICUS. 14–L, your Honor.

If you look at that tear under a glass, it becomes readily apparent that there are little fibers all along the edge of the tear.

Now, this fibrous nature is inherent in all of these papers and endows them with certain characteristics.

Now, if we observe this wax paper closely as I hold it up, the statement was made by Mr. Gesell, that, of course your Honor appreciates that wax paper and glassine are transparent. The Government's position is that wax paper and glassine are not transparent papers.

At 14–K there is a page of vegetable parchment paper. This, too, is of the fibrous group. And I submit that that is not a transparent paper. Now, as to these papers, almost any paper can be so arranged that when it is laid flat against a solid object, the object can be seen, to a certain degree, through the paper. How-
ever, it is only necessary to raise the paper very slightly
7955 from its background and virtually all of the transparency
disappears. When a paper is held up at a distance like this (indicating), it is quite apparent that there is no transparency.

On 14–G we find another one of the fibrous group of papers. This is sulphite. And here virtually no transparency exists.

However on 14–I we come to another species, the particular one here is saran. Saran is not a fibrous paper. If one tears saran, one will find along the edges of it that it is absolutely clean cut. It is a colloidal film of very minute particles spread evenly throughout the film.

Now, holding saran away from one and looking through it, it's quite apparent that perfect transparency is there. I can see every detail in the courtroom looking through this paper.

Mr. GESELL. Your Honor, not to interrupt Mr. Minicus, but would it be convenient at this time to put these samples in evidence so that this discussion can be directed to an exhibit? I think it would give more meaning to Mr. Minicus' comments.

Mr. MINICUS. I have no objection. I am only displaying the samples as they were displayed in the court before.

Mr. GESELL. I offer those samples that are in the offer of proof, then, as an exhibit.

The COURT. That will be admitted.

7956. The CLERK. Defendant's Exhibit 998.

(The paper referred to was received in evidence and marked Defendant's Exhibit No. 998.)

Mr. MINICUS. I think, if Mr. Gesell would be willing to do this, some of these wax papers and glassines and the foils in here are not designated as to thickness and weight, and I think it would be more helpful to our purposes if we could get such a description of them.

7957 Polyethylene is another one of the colloidal films. Here we have rather a murky appearance, but some transparency does exist in polyethylene.

Then on 14–G we have the product pliofilm, which is the rubber hydrochloride product, and another colloidal film, and here again we note a certain amount of transparency.

Greaseproof paper, however, at 14–F is one of the fibrous papers, and here again, for all practical purposes, the transparency disappears.

Now we come to waxed glassine. Waxed glassine has been stated to be the most transparent of the paper group. That appears at 14–E, and the way the exhibit is presently set up now the red dot shows up very nicely through the glassine. However, by lifting the glassine away from the red dot ever so slightly one immediately begins to see the haze develop.

The COURT. But the paper when it is wrapped about a product is in close juxtaposition with the product, is it not?

Mr. MINICUS. That would depend entirely upon the product, your Honor. If one takes a package of cigarettes, that is most

certainly true, and yet all of the cigarettes are wrapped in cellophane. However, when one considers all of the other products that have been discussed in this case to date, to-wit, peanuts, snacks, bakery products, and a multitude of other products that have been discussed, with the exception of cigarettes and
7958 possibly one or two others there is not that close impression of the paper upon the product on which it is wrapped; and I submit and I think we will show at a later date, your Honor, that it is not necessary with most of these products to remove them very far from actual contact with the product before the haze begins to develop.

This waxed glassine is a very good example. However, with any distance at all the transparency immediately disappears.

The same with glassine to even a greater degree, and that appears at page 14–D.

Cry-O-Rap, however, is among the film group, and here again we see a return to transparency. At least, as it is held in front of one, the details of the court room become very apparent. In cellulose acetate, we have one of the highest developments of transparency, another colloidal film.

Aluminum foil, of course, it goes without saying, is absolutely opaque. There is no transparency to that under any conditions.

Now, cellophane, we take the piece that I was just demonstrating from a package of cigarettes and hold that up and it is quite apparent that here again we have a return to complete transparency, and all the characteristics of this put it in the film group rather than in the paper group.

The COURT. Now get me out of the haze, Mr. Minicus. What does all this prove, this discussion?

7959 Mr. MINICUS. I am simply attempting to emphasize at this time this background for later proof, this broad division of these two groups of so-called substitute materials: On the one hand, the fibrous papers, on the other, the films.

The COURT. I see.

Mr. MINICUS. Returning to our discussion of these competitive reports, the Government has pointed out that in Government Exhibit 430, which is the report for 1928, the only competitors that have been spoken of at that time for cellophane were the importers; and in 1930, in Government Exhibit 436, Sylvania was then designated as the only competitor of the Du Pont Company in this field.

In 1934, in Government Exhibit 443, another competitive report, Sylvania is still designated as by far the most important competitive producer. However, this report does announce the advent of cellulose acetate and pliofilm. These are in the film group.

Now, Mr. Gesell made a concession that we consider very important last Friday. When we really got down to discussing these films, he said, "Of course they are unimportant; they only represent 2 per cent." So I presume the line of battle is going to be drawn about the issue of the fibrous papers vis-a-vis cellophane, and here although this competitive report does
7960 speak of two of the films, cellulose acetate and pliofilm, there is no reference in it to any of the fibrous papers.

Again in 1939, Government Exhibit 80, the competitive report for that year, the first twelve pages of this thirteen-page report is devoted to a discussion of the relative participation in the marketplace between Du Pont and Sylvania. On the next to the last page there is a brief consideration of the other so-called competitive elements, and what are they? Well, turning to Government Exhibit 80, pages 12 and 13, we find that the other competitive elements discussed at that time are acetate sheeting and Goodyear's rubber film or pliofilm, which Mr. Gesell has said are both relatively unimportant in this matter.

The third competitive element noted in this report was the imports and the poundage of imports from Japan are set forth for that year, and we have already seen that they represented less than one-tenth of one per cent of the total supply available.

Then turning to Defendant's Exhibit 595, which is in the form of a market analysis similar to the report under consideration—that is Defendant's Exhibit 596—595 is a report for 1949, and although it issued after this suit was filed, it still persists in pointing out the apparent defects in the other non-fibrous films and colloidal films, and omits any reference to fibrous papers
7961 as competitive factors in the cellophane market.

In light of this thing, your Honor, the Government challenges the defendant to comb its entire series of competitive reports to find a single statement in any one of them written prior to 1948 in which more than passing notice is given to any of the fibrous papers. Certainly there is none appearing that will carry the statement contained in Defendant's Exhibit 596 to the effect that wax paper and glassine are the most important competitors of cellophane. No other competitive report in the company's history had such a statement.

Now, I respectfully call your Honor's attention to the designation and nature of these documents. They are called competitive reports and they purport to discuss phenomena of the marketplace which threaten Du Pont's dominant position in that market.

7962 Now, if they accomplished anything for the purposes of this case, it must be to incontestably establish the competi-

tive conditions normally attendant upon unrestricted supply and unfettered demand did not exist for cellophane.

However, in 1950, someone attempted to change all of this by writing in the competitive report for that year the statement that wax paper and glassine are the principal competitors for cellophane. This is a very strange comment in light of the fact that the previous 25 annual competitive reports failed to discuss any of the fibrous *any of the fibrous* papers.

Now, I charge that Defendant's Exhibit 596 and other exhibits of theirs of like nature written since 1948, have no other reason for existence beyond constituting self-serving declarations manufactured only for the use of this trial. Beyond that, we shall prove before the trial ends that a great number of the documents written subsequent to 1947 and offered to this Court as evidence, are of an identical nature.

The first link in that chain of proof was made when Mr. Haley was forced to admit last Thursday on cross examination that Defendant's Exhibit No. 734 was composed entirely for the purposes of this trial. In Defendant's Exhibit 596 we proffer the second step in this line of proof, and there will be many more to follow.

7963 Thank you, your Honor.

Mr. GESELL. Your Honor, challenges and counter-challenges do not take the place of proof. I do, however, do want to call your Honor's attention to one device that has been used by Government counsel in his last discussion of the competitive reports. He has been careful to qualify it all with the statement "annual competitive reports." But we have in evidence also semi-annual competitive reports, and semi-annual competitive reports contain information concerning this so-called fibrous group of papers that he is talking about, and concerning the competition between cellophane and such products as glassine and wax paper.

So we do not get exactly over the hump by talking annual competitive reports and ignoring the semi-annual reports.

Now, apart from that, there is a whole wealth of proof about this competitive situation. We have put in hundreds of exhibits in our case showing the awareness of the competition, and the existence of the competition with wax paper and glassine. But there are two very significant ones in the Government's own case, which was very carefully culled from this point of view, and I simply want to refer to this briefly. They cover the span of this situation. 392 in April 1923, the detailed development report written at the time the company was entering this business, speaks of other

7964 wrapping materials, tin foil, glassine and wax paper, as the principal competitive products that are going to be encountered in the market. And then, if we jump all the way

to the other end of the scale and we come to April 1941, their Exhibit 5047, which is their principal document in this distribution aspect of their case, and there again the reference is to wax paper as the main competitive product to be encountered in the market.

And if we are talking back and forth about references one way or the other from the Government's side or ours, I hope some time when the Government comes to this proof they are constantly talking about, they will give us an adequate explanation of why agencies of the Government like the Bureau of Agricultural Economics in their report in August 1945 on Marketing and Production or their report in 1945 on packages and containers, makes no such distinction as they are now urging, and seeking to develop a new, artificial concept of a market.

These documents, and many other Government documents to which your Honor is going to be referred in detail, point up specifically the competition between cellophane, wax paper and glassine, and their functional interchangeability and their commercial comparability as to transparency.

Now we come to a new segment of the case, and that is again a sort of a willow-of-the-wisp issue that we have
7965 to deal with. It is the issue of capacity. Our documents on that are still in this volume 4 beginning in Exhibit 598 and going through to the end of the volume, Exhibit 621.

Throughout the trial, if your Honor please, I have sought to obtain some clarification of the capacity issue. Our view as to what the facts are is set forth in our trial brief under the heading "capacity" beginning at 14 covered by the paragraphs 36 through 41.

Now, we started off in the case on capacity with the Government's charge in Paragraph 24 of the complaint, which appears at Page 32 of the print, and that was an explicit charge in this form, that DuPont with the intent and effect of forestalling access to the industry by potential competitors, the Defendant has constantly expanded such facilities in an effort to satisfy increasing demand and for the purpose of maintaining and improving its dominant position and power, has within the three years immediately preceding filing of this complaint appropriated large sums to expansion of its production facilities for cellophane.

Now, that charge, I took it to be, was a charge which said that Du Pont was always anticipating demand, establishing capacity to overhang the market, to scare other people out of the business, and to keep itself in a dominant position. And we developed our proof to meet that issue, that there had been over-energetic
7966 expansion, and to meet the challenge *the challenge* that even within three years of the case we were expanding some more.

Now, the last two days of the trial we have heard a completely different song from the Government table. They say that there has been a chronic condition of shortage. They do not come out and say it except by inference, but they imply it, at many pages of the transcript, that this shortage is due to DuPont, and was intentionally brought about by Du Pont. That was the suggestion as recently as Page 4883 of the transcript. And they say that this shortage situation was viewed as a fortunate accident by the Du Pont Company.

Well, now, your Honor, we have got this situation, then, it seems to me, on capacity: The Government is saying to your Honor, "Since this is a monopoly case, find something wrong with capacity, either find that they got too much and put it in too fast, or find that they haven't got enough and they intentionally curtailed it. But since this is extremely important in our case, find something wrong with capacity."

Well, that isn't a very well-defined issue, your Honor, and it shows, I think, the difficulty that the Government is having in dealing with the very obvious facts of this case, namely, that Du Pont installed capacity only where necessary to meet a known
demand, and it neither put in capacity to overhang the
7967 market, nor intended or did anything to bring about a
shortage, but just acted as a normal, reasonable business person would in exploiting a patent product. But they will never come to grips with it.

They say, either say they put too much in, or they intended not to put enough in. Criticize them in some way.

Now, our purpose in these documents is to deal with the facts and simply to show what happened. And from them I think the Court will see that all this company did about capacity was to try to determine what the needs of the business were, and try to provide for the capacity. It neither overhung the market, and certainly didn't seek any kind of shortage.

Now, your Honor will recall that there is a great deal of proof already in on that covering the long series of expansions that took place at various times under various conditions. And all we have done here in this group of documents is to put in the reason sheets or background sheets for certain expansions, which aren't covered in the Government's case, in order that we have documentation of every major expansion. And then we have also sought to develop in detail the efforts that have taken place in the period since the war began, covering the period from roughly 1945 or so on down to date, to show what the company's actions have been in regard to this capacity question.

7968 The proof, then, in the main, is designed to supplement the detailed evidence which is already in as to the prior expansions.

Now, in order, your Honor, to focus on this wartime and post-war period, we have to revert for a moment to the problem of the Buffalo Plant, which was discussed at length by Mr. Minicus the last two or three days, and which the Government table seizes on as proof of Du Pont's intention to bring about what they call this fortunate accident of a chronic shortage, in other words.

So we start with that, and that is set up in Government's Exhibit 32. I would like briefly to refer to that as a preliminary to a discussion of these other exhibits.

7969 At page 154 and 153 of that exhibit you will find the facts to which I refer. You will see on the first page, 153, this is written as of August 1944, looking back on the picture that had taken place and summarizing the events, and you will see that what happened was this: That first the Government limitation order L-20 came out. That was an order which restricted the uses of cellophane, as you will see in the second paragraph under the sub-heading on that page issued by the Office of Production Manager, and then the report goes on to say that in February 1942, there at the bottom of the page, the cumulative effects of the order, sugar rationing, tire and gasoline shortages, began to be felt, and the downward trend began to gather momentum in March as labor shortages in the customers' plants were added to the other difficulty and volume started to fall off. In other words, you had a situation, your Honor, where the Government said you could not sell cellophane for certain uses, which of course cut down the demand. Then with the sugar rationing and all the other war-time developments, many sweet goods and other things that were wrapped in cellophane could not be made, and then the converters found that they could not operate to capacity, and the orders fell way off; and if you will look at the next page you will see how drastically they fell off. From October 1941 to May 1942 the casting machines in operation dropped from 55 to 35.

7970 Then the report states that war-time business was not developing rapidly enough and there were 20 casting machines idle. 20 machines, your Honor; that is two-and-a-half plants. There were 20 casting machines idle and a cloudy sales outlook ahead, and it was decided to close down one unit of 8 casting machines, and so in 1942 we closed down Buffalo No. 1, the oldest and most antiquated plant we had.

Now, I say that there is nothing in that document offered by the Government that indicates an intention to bring about the happier condition of a chronic shortage, but this is simply a

reasonable business decision to shut down a plant when you have two-and-a-half plants idle due to war-time conditions that affect not only who you can sell to, but your customers' demand and availability of raw materials and all the other dislocations in the market.

The reason the plant never started up, of course, is conceded by the Government and knowledge on all sides. The Government directed that it be converted to produce another war material, and it was.

So we then come to the situation of what happened after that? Did Du Pont intend on the one hand, as the Government intimates, to keep a shortage going or did it after that date seek to make so much capacity, as the complaint charges, that it would discourage others from entering the business? And with those two points in mind I want to consider some of the evidence that we
7971 have offered in this group of exhibits which I now formally offer in evidence, 598 to 621.

(Defendant's Exhibits 598 to 621 were received in evidence.)

The COURT. What happened to the Buffalo plant machinery? Was it scrapped?

Mr. GESELL. Some of it was converted. You make there the Cordura yarn, a type of yarn that was used in the manufacture of tires; and a good deal of the machinery was used for and converted to the manufacture of that yarn. I think one of the reasons that the conversion took place rather than the construction of new facilities was that you could get this required material in war time without new plant being built by converting the existing machinery.

The first exhibit gives you in graphic form, your Honor, a picture of the relationship between capacity and sales for this entire period from 1924 to 1950. It is a pictorial presentation of the relationship. The heavy line is sales. The dashed line is the capacity and the dotted line is simply a projection of the October sales, which is the normal peak month on an annual basis; and then you will see at the bottom that we have keyed in the point when different capacity was installed. You see from 1924 as Yerkes No. 1, that was the first plant at Buffalo, and running across you can see when the other plants were built, and then in the one instance of the discontinuance of Yerkes No. 1
7972 there in 1942—the precise dates, your Honor, appear in other exhibits, but against this chart you get a picture of when the plants were coming in. You will notice, for example, that one plant went in immediately upon the cessation of hostilities, and we will come to that in more detail in the exhibits. You will see that in the depression period from around 1930 on up until

1938 or so sales were lagging somewhat below capacity. You will see also that such a lag took place at the time Yerkes No. 1 was shut down, brought about by the Buffalo plant conditions that I have just reviewed with your Honor. But with that exception you will see that throughout this period there was a very close correlation between capacity and sales, and that there was not in this entire period of twenty-five years a substantial capacity overhanging the market. This reflects, in other words, the business management of the company in installing capacity as needs required.

Of course, the increases in capacity, as your Honor is now aware from the other proof, occurred not alone from the new plant, but occurred in very substantial degree from efficiency improvements of existing plants.

We have in the next three exhibits a series of tables, your Honor, which chart or tabulate the sales growth and production increases and the information in the exhibits concerning capacity. If your Honor will look at 600——

The COURT. I don't understand Defendant's Exhibit
7973 599. Will you explain it to me, the two columns "Actual," and "On Annual Basis"?

Mr. GESELL. The "Actual" are the actual sales that were made in the month of October each year, and the "On Annual Basis" is the projection of those sales by multiplying that by twelve, which is the basis for the doted line that appears on the schedule.

The COURT. I understand.

Mr. GESELL. It is really just a supporting table showing how we got at it.

Exhibit 600, your Honor, I think discloses rather graphically one of the chinks in this hydra-headed contention that is coming on the capacity point in the Government table. Look at 1946 and 1945. Take a line there in 1945. That is the end of your war period. Du Pont had increased its production in a period of twenty years up to where it was about 96 million pounds, and Sylvania had come up in the period of its existence to 30 million pounds. Then drop down and look at 1950, your Honor. 202 million pounds for Du Pont compared to 96 million at the end of the war period, a doubling in a period of five years of production that had taken previously twenty years to develop; and you see the same doubling on Sylvania's part from 30 million to roughly 60 million.

Now, that on its face does not suggest that there is the desire here to create a happy, chronic condition of
7974 shortage. This suggests rather a very dynamic increase in the productivity of this business immediately upon the release of the war-time restrictions.

The other interesting fact is, your Honor, that Du Pont's increase took place without the addition of a single casting machine, after the year 1947 when the Clinton plant came in, and then finally, your Honor, we have it in the evidence already that by 1953 Sylvania expects to be producing 100 million pounds or double what it is producing here in 1950.

The COURT. Is Olin in operation?

Mr. GESELL. Is Olin in operation? Yes, it is, your Honor. It is in operation. You can see a picture of its plant on the last page of Volume 7. It is in operation and the initial date of the first two machines coming in last July is shown on that exhibit. It is now going full blast, and in this group of exhibits I will show to your Honor the circumstances that led to that development.

Now, I am not going to discuss these various documents we put in just to fill out the story of each capacity increase. There are only certain ones that I wish to comment on. The ones that fill out and show the same general consideration operating that operated in the earlier group is already in the Government's case.

The third paragraph of 603, for example, gives the reasons
7975 for that appropriation, straightforward business reasons, the difficulty of meeting the demand for the product from the existing capacity, and the need there in 1930 of adding to the capacity. None of these talks about anything but straightforward investment problems.

605-A I pause on for a moment, your Honor, simply because that is the appropriation request on the plant your Honor saw. It was omitted from the Government's group. It is an early date, of course, because that plant went in at an early date, but you will see there at page 1231 the initial appropriation request and reason sheet for the construction of the plant that we went through during the recess. You will see the reason for making the expenditure at the top of 1231-A.

"During the past several years construction work on casting machines has not been of sufficient magnitude in order to keep ahead of the very rapid and unexpected increase in sales of cellophane." There are the detailed estimates there.

If you will turn over, your Honor, to Exhibit 610, there is a point there that I want to comment on. You may remember that in the discussion of capacity I referred to the fact that there was an occasion when capacity had been contemplated and then was withdrawn when the sale did not develop in a manner which met expectation. That went, of course, to this notion the Government has of Du Pont's magical ability to guess exactly what was going to happen. It also goes to whether this capacity is being put in for practical, normal business reasons or with the idea of overhanging some market.

7976 You will see at Page 1243 the withdrawal of the decision in 1938 to build at Clinton a $6,000,000 operation, because as you will see from the table, the actual sales forecast that they had in mind when they made the initial appropriation had not been borne out by actual sales, and therefore, the executive committee determines that it will not go forward with the construction of the plant on which preliminary money had been spent for the purchase of land and design.

The COURT. Will you explain to me what is meant by the colloquialism "overhanging" the market?

Mr. GESELL. Well, my understanding of it, your Honor, is that the Government believes, on one horn of their contention, that we built capacity in excess of the requirements of the business in order that we would always have it there and turn on a spigot if other demand came up. And that that was done with the intention and purpose of keeping others from coming in.

If we would have had such an intention, we wouldn't have stopped this Clinton Plant.

Then, your Honor, we come to an exhibit that I wish to emphasize in passing on this productivity. If you will see Exhibit 612, the second page, an analysis that was made in 1944 of Sylvania's annual report, you will see there on Page 1248 a comparison of the investment and the per pounds of total sale on investment
7977 for cellophane, and Sylvania.

You will see that Du Pont had, by and large, put more money into the construction of those particular casting machines, but because of its greater productivity the total investment per pound of sales was substantially smaller than Sylvania, a reflection of the relative efficiency of the two concerns.

And then at 613 you will see a summary of some of the factors that have operated to keep down the investment per pounds of sales, the work on wood pulp, the shredder design, the casting machine increase of 40 to 60 percent, the work with illium in the hopper lifts, the conditioner units, the coating tower speed was increased 50 to 70 per cent, and the slitting machine speed, these and comparable matters, all of which are going to be covered by witnesses from the point of view of showing how we were able without increasing physical plant to increase the productivity of the unit by research and efficient operations.

Then on this question, your Honor, of whether we were desiring to create a chronic condition of shortage, I direct your attention to two exhibits, one is Exhibit 615, in which there is a review in 1944 looking to the end of the war, as to what steps are going to be taken plant by plant as soon as conditions permit to increase the productivity of the plants, and a plan for the construc-
7978 tion of an entirely new plant at Clinton.

And you will see that there were projects at work all being prepared during the war period at all of these plants to develop increased productivity at the earliest possible moment.

And then immediately after the war, we went ahead with the construction of the Clinton Plant. And you will see the News release on that item at 618, and the actual minutes authorizing the construction, in the exhibits that immediately precede it.

That, I take it, is the construction that was particularly criticized in the complaint when it said that within three years immediately preceding the filing of this complaint, Du Pont had appropriated large sums to the expansion of its production facilities for cellophane. At the time they drew the complaint, they thought this was bad, because were were expanding. Now they minimize it and say we were trying to create shortages.

And then, finally, your Honor, we come to the program for an additional plant, which was killed by this suit, Exhibits 620 and 621 show the development of that. 620 is the appropriation request made in April 1947 to build, or to increase the casting machines from 17 to 24 at Clinton, which would have meant increasing by eight additional machines the capacity of Clin-
7979 ton. And you will see there that the project was to involve an expenditure of around $12,800,000, and an appropriation for the design work, and so forth, was requested, that would have put in eight additional machines at Clinton.

The statements as to the reason why the plant was felt necessary appear at page 1263 of this Exhibit 620, in the second full paragraph where we point out that the customers are demanding more cellophane; that we have had a big program with A & P and Swift, and development of these self-service grocery stores, and that we have an obligation to supply the needs of the customers.

And that request for that plant goes to the financial and executive committees of the Du Pont Company, and the appropriation is disapproved and rejected in Exhibit 621 on March 17, 1948. The report sets out that after a discussion with the rayon development and legal departments, it was moved and unanimously carried that the request and report be ordered filed, that the aforesaid Part I appropriation request be not approved, and that the following resolution be adopted, and then the DuPont said in this resolution that it wished its development department in collaboration with the rayon department to come back with a report to the executive committee with the possibility of interesting one or more concerns in going into the manufacture of cellophane, cellulose film,
7980 and cellulose bands, on the basis set forth therein.

The COURT. What was the motive for that?

Mr. GESELL. The motive for that, your Honor, was to supply the needs of the public. Here the company had this situation: From its own operating people a request for additional capacity, a clear insufficiency of productivity. Here it was confronted with a complaint which said "You already have too many plants. We want to take some of your plants away from you," and a criticism because the company had been expanding its facilities. That is Paragraph 24, Page 32 of the complaint. And the only basis upon which that dilemma could be resolved, considering the substantial expenditures of some $12,000,000 that was involved, was to say, "Well, if the Government says we can't supply it, the thing for us to do is to go out and see if we can't encourage someone else to supply it." Because as the report on the appropriation says, we have an obligation to see that the supply of cellophane is sufficient to meet the demand we have ourself created for this product.

And so as a business decision the company decided it would not risk further investment in the face of the Government's suit seeking to take its plants away and criticizing it for expanding, and went forward and interested another producer to go into this business. And it was that that led to the licensing of Olin
7981 under the contract and under the arrangements which we are going to discuss in the subsequent Section 7 of the exhibits here.

Now, the only other contention, your Honor, that is made here, that I want to mention briefly, is the Government's charge that because this shortage existed, it proves the existence of monopoly. On that I merely want to comment that there have been enormous shortages, as the Court is aware, throughout American industry ever since the war period. We know them in our every-day experience. And they are borne out repeatedly in publications in the newspapers and in the trade.

The COURT. What are the engineers' best guess as to Olin's potential in terms of production?

Mr. GESELL. Well, I think the potential of their existing plant is known, your Honor, to be in the neighborhood of 34,000,000 pounds. Olin, however, is under no limitations by reason of contract or otherwise to increase its capacity to any point it wishes to, and has already indicated that it has plans afoot to go to at least 100,000,000 pounds. To what productivity it will ultimately go, nobody knows. This contract involved the construction of the minimum efficient basic plant of eight machines. And that plant will have about 34 million capacity.

Of course, what developments and improvements they are able to bring about to increase that productivity remains
7982 to be seen. But that is a capacity, your Honor, equal to the

capacity that Du Pont itself would have created through the expansion of its Clinton facilities had not this suit been filed.

Mr. MINICUS. There are a lot of general statements that are made, your Honor, to which no citation has been made. I refer specifically to the semi-annual reports that are supposed to speak of these fibrous papers——

Mr. GESELL. 438 and 439.

Mr. MINICUS. I again refer to the statement by Mr sell, again general, that there are many commodities in our every-day living today that are still short as a result of the war, and there was no specification of those commodities.

I know at the end of the war I had a great deal of trouble getting an automobile, but I haven't had any trouble of that nature in the last four or five years. I have been able to buy a television set, a washing machine, a new house, any number of things.

Mr. GESELL. I can give those citations, in order to keep the record clear. The National Production Authority in July 1951, your Honor, announced a list of 77 supply chemicals that were scarce, an additional 122 which were tight, in addition to the United States Department of Commerce in its business publi-

cations for 1951, report that there are shortages in all coarse
7983 papers, including glassine, greaseproof, unbleached Kraft, bag, shipping sacks, converting, and other papers, showing monthly average production figures of those items being for the period 1945 to 1950. I can give many more if Mr. Minicus is interested in having them.

The COURT. Proceed, Mr. Minicus.

Mr. MINICUS. Thank you, sir.

There isn't any doubt that for more than 10 years the productive facilities in the cellophane industry had been willfully insufficient to satisfy the demands of the buyers of this material; that the chronic shortage of cellophane has caused great hardship to people in the industry, and considerable deprivation to customers is freely admitted in the Defendant's case.

Within this peculiar duopoly structure existing at the manufacturer's level, there exists no choice of adequate alternative sources of supply. This large seller completely dominates the policies and practices of the smaller supplier. And the latter so reflects the production and merchandising systems of the former that the practical market effects are identical with those one would expect to find under conditions of 100 per cent monopoly.

The evidence establishes that beyond any doubt.

Over and above this inability of buyers to obtain an alternative

source of supply, which might be operating under divergent
7984 policies, these buyers were restrained by an even more effec-

tive limitation. There just wasn't enough cellophane outside the Du Pont Company to begin to supply their requirements. Thousands of buyers purchase cellophane. Yet in 1941 the evidence shows that Du Pont's top 25 customers would have completely exhausted the entire production of the Sylvania Corporation, and where were the other thousands to go for theirs?

One thing is very certain: Du Pont did not achieve this dominance because it was thrust upon it. From 1930 to 1940 the period of most active monopolization, the evidence shows clearly, it expanded and continued to expand with the primary objective of preserving its position. The result is that purchasers of cellophane are absolutely dependent upon Du Pont for from 75 per cent to 80 per cent of their total supplies. And that is all we have said about this expansion question.

The only position the Government has taken in regard to expansion, your Honor, is that Du Pont expanded to purposely keep its dominant position. It wasn't the result of an accident, nor was it thrust upon it, or anything else. It got there, rightfully or wrongfully, through its own desires.

Now, about 1941, the system broke down, and because of the inelastic nature of this dilopoly structure, it has never re-
7985 covered. It is true, as Mr. Gesell says, that in that year Du Pont shut down a plant, and the shortage set in almost immediately thereafter.

Now, the Government has offered no proof and doesn't intend to, that the Defendant intentionally curtailed production in that instance. That is not our position at all. The entire matter was possibly only a miscalculation of the future demand but that single miscalculation by so dominant a supplier caused extreme deprivation to the furthermost point of the industry's chain of distribution. One mistake by one supplier, and everybody in the industry felt it.

Sylvania didn't reduce its capacity during that transient lull in business, and believe me, your Honor that lull was very transient.

Limitation Order L-20 did come out, and for a while there was a falling off of buying, as Mr. Gesell mentioned, in March 1942. I refer your Honor to Government's Exhibit 84, the competitive report for the year 1942. There at Page 321 in the second paragraph is the statement "From September 1942—" only six months after that March date—"the combined production of Du Pont and Sylvania was insufficient to meet civilian demand and large war orders.

So only six months after that falling off of business that Mr. Gesell says caused the Du Pont Company to shut down an entire plant, shortages had set in and were in active operation.

7986 Now, Sylvania didn't reduce its production during that period—pardon me, Sylvania didn't reduce its productive facilities during that period. Sylvania maintained their production facilities at the same level. Its production, however, the chart will show, did fall off to some degree, less than half of what Du Pont's fell off, and the exhibit that that is in very clearly shows that the reason for the falling off in Sylvania's production at that time was the result of war work, calling for heavier types of cellophane that could not be cast at the rate of speed that the usual commercial brands could, consequently less poundage came out of the machines. The second reason given is that they were not able to maintain their machines in the operating condition of normality because the mechanics just weren't available to keep them up.

But when it's all said and done, through that period all of the tables will show that Sylvania's production fell off less than half, relative to Du Pont's.

The Government could only submit, then, that had there been in existence at that time additional manufacturers, not two in the entire industry or three in the entire industry, but some additional manufacturers making this product who were pursuing independent policies, the drastic results would not have been so severe to the people that depended upon this industry for their livelihood.

7987 Now, the Defendant, we submit, has offered a whole series of excuses for this prolonged shortage. Yet one has to look no further than Du Pont's dominance for the true reason there according to the exhibit put in evidence by them this morning, Defendant's Exhibit 614, in 1944, in which cellophane was very clearly short, Defendant's Exhibit 614 shows conclusively that it was decided not to reopen the Buffalo Plant.—In that year there was considerable discussion about whether they should reopen the Buffalo Plant for cellophane. And then they said, "Well, how about building a new unit out in Clinton, Iowa?"

So they compared the relative merits of starting a new plant from the ground up in Clinton, Iowa, that would have cost more money to build, or to reopen the Buffalo Plant for cellophane. What happened? I think the document is quite clear that because the rate of return on investment was only 18.5 per cent under operations at the Buffalo Plant as against a new plant at Clinton returning 25.9 per cent, they decided to build a new plant at Clinton.

Maybe that is what Mr. Gesell calls good business operations. It certainly isn't a violation of law. But we again submit that additional independent producers might have been satisfied with that lower rate of return, particularly since the return was as much as 18 per cent, and they might have opened up that plant.

7988 If there were more elasticity at the supplier end of this market, additional cellophane would have become available.

And so it goes on and on and on. The business careers of thousands and thousands of buyers actual and potential—remember those that wanted to come into this market that couldn't get in there at all because there was no cellophane for them, those buyers are at the mercy of the whims of one manufacturer because, and only because that manufacturer controls in excess of 75 per cent of the supplies available to them.

7989 This economic abnormality approaches the ridiculous in point 41 of Defendant's trial brief. Because the Government in 1947 filed a suit to correct this situation, now the Government of the United States has become the whipping boy for the cellophane shortage. Apparently everybody and everything is responsible for this buyer's predicament with regard to the shortage of cellophane save only that manufacturer which controls, in effect, the entire supply, and he is blameless. The raw materials are at fault, the Government orders are at fault, the Government suit is at fault. The only one who in this court room is unwilling to accept the responsibility for this shortage is the manufacturer who through all these years has controlled 75 per cent of the supply.

In conclusion I submit to the Court that on these facts alone reside sufficient reason for profound consideration leading to drastic corrective measures in this industry.

Mr. GESELL. In 1944 the Government was operating the Buffalo plant for the manufacture of rayon. Mr. Minicus knows that.

Mr. MINICUS. I cited the exhibit there, your Honor, and that exhibit is right in the book. They were considering the re-opening of it.

Mr. GESELL. Government Exhibit 32 shows the situation, if you want to read it. It is his own exhibit.

7990 I am glad also that he has now accepted a share of the responsibility for the shortage.

Now we come to Volume 5, your Honor, and that is in two parts. Roman VII which relates to some of these so-called potential competitors and Roman VIII which relates to certain patent issues. I want to discuss first of all Roman VII. We have there documented certain facts as to four of these potential competitors: Rayonier, Carbide, Visking, and Skenandoa. These are but four, your Honor, of the long list of potential competitors that the Government says were excluded. The bulk of their group are foreign manufacturers of various kinds, and to the extent that that is pertinent it will be covered in the foreign

section. Domestically this covers that we understand to be the principal cases, but they also cite Goodyear, Monsanto, and I believe Eastman, as well as Marathon, American Viscose, and Transparent Packaging Company. Goodyear, Eastman, and Monsanto are situations where their claim is founded solely upon the settlement of specific interferences with those three manufacturers. Marathon, of course, has been dealt with in the patent part of the case, and we have documents, I think, from Transparent Packaging. There is no proof. And American Viscose is covered by the other documents in the foreign section.

So here we are covering the four remaining situations: Rayonier, Carbide, Visking, and Skenandoa.

7991 I first want to offer the group pertaining to Rayonier, 622 to 634, inclusive, and in connection with the offer of 622 we withdraw the material that appears under "All Others" and the totals, and offer merely the information as to the five largest purchasers, their suppliers, Riordon, Rainier, Brown, Pagel, and Weyerhaeuser. Your Honor will recall that Mr. Haley, when he was on the stand, acknowledged the discrepancy between the purchase and the consumption figures which we found on check is based on insufficient purchase records available in certain years, and so what I want to do is withdraw "All Others" and the totals and simply offer the material as to the five concerns as to which there was no challenge after the check.

(Defendant's Exhibits 622 to 634, inclusive, were received in evidence.)

Mr. GESELL. Now, this group as to Rainier, your Honor, goes to 634, and I think in each of these situations as I take them up it may be useful briefly to recapitulate where we are on the Government's case as we understand it, and specifically to what our proof is addressed.

The Government challenged a contract, a formal written contract which Du Pont entered into with Rainier—the contract had expired by its terms in 1945—under which Du Pont supplied Rainier with technical information for a fee, and Rainier in turn agreed not to use that technical information in the manufacture of rayon and cellophane. The Government says

7992 that that contract is illegal, arguing that the Court should apply new and different law to the licensing of trade secrets and technical information. You remember the long discussions that the Court had both with Mr. Roache and Mr. Minicus on the question of the legality of the contract. As far as the legality of the contract is concerned, we presented our arguments and, as I said at the opening, we are concerned here with facts and fact questions. On the fact questions we are concerned with two

law who began to come along with satisfactory ideas. And he applied for a patent and he says the patent was applied for and he secured one, on Page 5, but it wasn't adequate because he found that the older basic patents issued to Cohoe Fox and Acton for cellulose sausage casings. And after a lot of difficulty he found out that Du Pont owned those patents.

Now, imagine this, your Honor, here is a man who is starting from a little boy working at odd hours, has finally developed a way of making synthetic casing, and he says this is at last his idea of 15 years of self-denial and hard work to make a million dollars, and he gets up to it and finds that Du Pont has the patents. And he is not able to go forward. And then he says, "Then followed a series of negotiations with Du Pont based on my contention that a satisfactory frankfurter casing could not be made without our patent, and an admission on my part that we needed the Cohoe patent to avoid infringement. Because in those days I, too, had fears that the large corporations would steal the shirt right off the back of a helpless inventor, I enlisted the aid of your ex-associate, Salmon A. Levinson. It was a pleasant surprise to
8013 me to find Du Pont courteous, fair and cooperative. We came to an agreement and worked out a license agreement. In drawing it I recall that it was I who made all the demands, not Du Pont. They never sought a provision which they were not willing to give me the counter-part of. The final agreement provided that Du Pont gave me an exclusive license for sausage casings, not only under the Cohoe patent, but under all of their patents. On my part I gave Du Pont an exclusive license for noncasing uses under our patents and applications and a small interest in the voting common stock of a company to be formed. They received none of the preferred stock. Mutually we were to exchange technical information and assistance. I think it is worthy of note, first that Du Pont accepted a comparatively small interest without any cash requirement or royalty in exchange for their basic patents, and secondly that all this was done before a company had been incorporated or any commercial equipment installed."

He says, "I have never examined the contract since the day it was signed back in 1925, nor do I think Du Pont have either. It was the most fortunate event in my whole life. Du Pont have more than fulfilled their contractual obligations and have never in the slightest degree taken the least advantage of me or my company. They saved us years of effort through their technical assistance.
They generously transferred experienced and skilled men
8014 to our company (our vice-president and treasurer, our plant superintendent and our shops supervisor came

directly from Du Pont). Their engineering department aided us in the design and construction of our original plant and of our new plant. Technical information has flown to us steadily without demand from us. Their representative on our Board of Directors has been of great aid to us, and it would now be a severe loss to us should we ever be deprived of his services. Du Pont, on the other hand, have graciously stated that they too have received valuable contributions from us, and while I can't see the basis for that acknowledgment, I hope it is true because we certainly owe it to them."

That is the man that we are supposed to have stifled with monopolistic power and kept from competing with us.

He goes on and talks about various things that he did to improve his product, about the tremendous growth that his business had, and how sales have increased, and how his business developed in various lines, the different people he worked with, and his court litigation with Sylvania to which there has been reference.

The COURT. You haven't got Judge Frank's reply, have you?

Mr. GESELL. No, your Honor. I did write Judge
8015 Frank and ask him for his letter to Mr. Freund, and he told me his secretary couldn't find it, but that he recalled this was in connection with an article he was writing on patents in the Saturday Evening Post.

Now, it seems to me that that letter written under the circumstances that it was, is a clear indication that Mr. Freund didn't consider himself oppressed, and there are certainly indications that Du Pont contributed to the organization, the formation, the growth and development of this company.

Now, this was a profitable enterprise. It was a very profitable enterprise. And we have shown here the end results of the investment. I direct your Honor's attention to that now. It is the last in this group, 656. This shows that DuPont sold all of its stock in Visking prior to the suit. It shows what the shares were. It shows that they had made a total investment in the shares of some $40,000, and that they sold their interest which was always a small interest against the total, for $2,573,000 after taxes.

Mr. Freund clearly reached his ambition of being a millionaire through his invention, and the participation by Du Pont through the ownership of stock in this enterprise was certainly profitable.

8016 There is the question now as to what were the terms of the agreement. Was there some broad understanding, or was it strictly a license agreement of the kind that we have described? In other words, was there some understanding over and above its formal provisions?

We have here a document that bears on that question, which I want to mention briefly. We also have in here a whole series of documents showing that at various times Du Pont had an opportunity to buy out Visking's stock, and that they did not make an offer on the stock and didn't buy Freund's interest and take control.

A cancellation of the agreement, which is challenged as to being in good faith, is covered by Exhibit 657, where you will see Mr. May's instructions are to implement the cancellation in accordance with its terms.

644, your Honor, is the document that analyzes the agreement, and which I wanted to stop and discuss. It appears at Page 1305. Mr. Beadle is the author. He is writing to Mr. Carpenter in January 1931. He is analyzing the agreement with Mr. Spargo, and there he states categorically that Freund is free to engage in the manufacture of sheeting cellophane for any use at any time providing he does not infringe on cellophane's patents; that he will be free after Cohoe expires to sell Visking Company tubing for use in any field, unless improvement patents come along.

He further says that cellophane is free at any time to
8017 make seamless sausage casings provided it doesn't infringe on the Visking patent, and of course, provided it doesn't utilize secret information which it obtains from Visking.

In other words, the analysis at the time as to the meaning of that agreement is that it meant what it said, and that there was nothing broader or different, as the Government contends.

Its cancellation in 1946 is shown to be bona fide by Exhibit 657, in the absence of any other proof to the contrary, and to say that because at the time of the cancellation Mr. Freund expressed sentiments of good will toward Du Pont, in the light of his own letter showing why he should, and to seek to distort that into a veiled reference to continued conspiracy, I think is to press the proof completely beyond the point that any reasonable man can take it.

8018 Now, we have a few documents here that are three in number, all included under a single exhibit number, 658, relating to Skenandoa Rayon Corporation. Skenandoa is one of the companies that is listed, your Honor, and the charge is made that actual exclusion of Skenandoa from engaging in the cellophane business will be shown. These documents should be related to Government exhibits which show that Du Pont at this time had knowledge that there were negotiations between Wolff in Germany and Skenandoa looking toward Skenandoa entering the business of manufacturing cellophane and discuss the desirability of lowering the price as having one advantage of making it more

difficult for Skenandoa to go ahead. Now, these letters on which the Government rests its proof must be read in the light of these letters earlier in date which show the basis upon which Skenandoa decided not to enter the business.

Mr. Ferguson, the author of this correspondence, is connected with F. L. Carlisle, an investment banking concern which was promoting Skenandoa's interest and was also an officer of Skenandoa, and he is corresponding with Mr. Gordon of Skenandoa, and he informs Mr. Gordon that on October 16, 1929, that they had decided not to go ahead with the Wolff people on Transparit. Ferguson says, "I put our decision to not go ahead with them entirely on the basis of the inadequate return on the amount of capital which in our opinion it would be necessary to em-
8019 ploy in the business. I told him that we concluded it would be necessary to have $1,500,000 to successfully carry on this business and that with a margin of profit not greater than 25 cents per pound before overhead the proposition could not be considered further."

Mr. Gordon writes back and says he is disappointed mainly because it means losing a connection with Wolff and their respective associates in Germany, and Ferguson writes further that the banking people representing, apparently Transparit have also been in to see him, and he tells them why he has turned Wolff down, and he says, "I told them that we felt the same amount of capital which would be required in the Transparit business could be employed in expansion of our rayon business and yield a higher return."

Mr. MINICUS. Your Honor, we are not objecting to these documents, but we wish to point your attention to the fact that these are documents between two people that are apparently not in any relation with the Du Pont Company at all. We would appreciate some word, at least, where they come from and how they get into this case. These are people in the Skenandoa Company writing to each other. We don't know where the document came from at all.

Mr. GESELL. They came from Mr. Ferguson's file. He is going to appear as a witness.

Mr. MINICUS. Thank you, sir.

8020 Mr. GESELL. The Government has talked to these people. They did not call them after they talked to them because they did not hear what they wanted to hear. We are going to call them.

So here again, your Honor, the theory does not match up against the fact. The reasons Skenandoa did not go into a deal with Wolff is because they could invest the same amount of money in rayon and make more money.

things: What was the intent of that contract? and what was its effect? and it is to those two issues that our proof is addressed.

In the documents we traced out—and I am going to go through them individually—we trace out the development of this relationship with Rainier and the reasons underlying the contract which the Government challenges. In the first exhibit of the correspondence, 624, this is a document written to Riordon four years before the Rainier contract, and it simply shows that we were unprepared at that time to make any kind of arrangement with Riordon and other wood suppliers for the supplying of technical information which would assist them in the development of wood pulp. Riordon, as you will see from the schedule, was a substantial supplier of wood pulp, one of Du Pont's largest suppliers throughout this period. I believe it is the Government's contention in their trial brief and in the comments they made to the Court that the arrangement was a type
7993 of arrangement we would make with any supplier and that the contract provisions under which we agreed to disclose secret information and under which we said that they could use it for any purpose they wanted to in connection with the manufacture of pulp, but not for any other reason, and must keep it secret, was just the usual kind of arrangement we would make with anyone. I think this document shows that not to be the case.

Now, with Rainier we pick up with this early document in 1929, and you see Mr. Seaman of Du Pont is working with Rainier in the development of wood pulp. You will notice at that time it is the Du Pont opinion that they do not think that the pulp that Rainier makes today will be properly blended to meet cellophane requirements; that they are going to install certain experimental equipment at Rainier to assist in the development; and they point out that Rainier does not know anything about this business; and they say, "Viscosity control is totally unknown to them and they have no idea at all as to what factors influence viscosity." They say that they will set up the equipment required for viscosity determination and will make various studies and determinations of viscosity, alpha cellulose and iron, and so forth, on the pulp, sending samples of pulp to Du Pont for further analysis. It says, "It will probably be necessary for us to send a chemist out there to teach their men how these analyses should be
7994 made," and that this is going to be an expensive matter for which money must be appropriated and it is going to take a period of time working with them. The letter emphasizes that they are going to have to do testing in semi-works operations after Rainier has made some progress with the development and

that Du Pont is going to have to maintain very close contact with the Rainier people.

Now if I may, your Honor, I would like to talk about two of the technical aspects here. We were seeking to work out with Rainier a low viscosity pulp which has the advantage of requiring less time in the aging room and therefore increasing the productivity of the chemical building, and we were also working to bring about a pulp of high alpha content; that is to say, a large cellulose content, which would result in the manufacture of a better volume from the same amount of wood pulp material. You will see a discussion of those aspects in the next exhibit 626 on the subject of Rainier and high alpha pulp in which we say that they are interested in developing high alpha pulp for rayon and we have discussed the subject with them in detail; and we say that our purpose—and I think this is of some significance—in contacting the Rainier people is to insure ourselves of the reduced price which may be secured by the manufacture of pulp on the West Coast. The low cost of their pulp comes chiefly from their low cost of wood, although their cost
7995 of operation is also somewhat under that of eastern mills.

In other words, we were working with Rainier because they had a cheap wood pulp and because their actual operations were lower than the operations of the eastern mills. But in order to be able to use it for rayon and for cellophane we had to work with them to give them the necessary techniques.

Dr. Benger goes on to say, "These people know nothing about the manufacture of a high alpha pulp or the characteristics required of cellulose for chemical purposes, but with the experience which Mr. Seaman and other members of our organization have, we feel that they stand a very good chance of being able to produce a material which will be satisfactory for rayon.

"We know of no reason why Rainier should not be able to make and deliver to us a high alpha pulp comparable to Brown's alpha at savings roughly corresponding to that which we calculate for the saving over Riordon."

There you see indications of purpose, the purpose being to teach this new source of supply sufficient technical information so that he could make the kind of pulp that could be used for rayon and could be used for cellophane; and then you see a year later that we are reporting that Rainier pulp was quite interesting, but the work has been deferred until the product has been made more uniform. They still haven't got what we want.
7996 Then in the next exhibit is a reference to Dr. Pickens who has been out and comes back with a proposal which led to the formal contract that we contribute technical information to them and permit, Dr. Pickens—he will be a witness here, your

Honor—to go to Rainier and work with them on this technical information in return for which they would make a satisfactory wood pulp and would offer a price concession in the amount sold of the higher alpha cellulose pulp; and we see in this letter reviewing the situation to Rainier's attorney, Mr. Higgins, what our understanding of the arrangement is and why we are entering into it. The second full paragraph on page 1279 you may wish to mark for reading:

"It of course should be remembered that I have several times expressed during our conversations respecting this matter what we believed was Mr. Mills' original intentions when he suggested cooperative efforts." They say he had in mind that this would be a worthwhile arrangement to both sides, Du Pont to contribute Pickens and the technical information and advice and assistance, and Rainier to contribute a wood pulp purchase price concession and royalties for the pulp sold by Rainier as a result of the combined efforts. None of that is in terms of anything but a proper purpose of developing Rainier as a satisfactory supplier of wood pulp, both for rayon and cellophane.

7997 Then the decuments go on, and there is another one here in 630 from Gladding. "The original intent was to effect a cooperative arrangement between Du Pont Rayon and Rainier to improve sulfite pulp for the manufacture of the products which the Du Pont Rayon Company produces." They are mentioned there, and he analyzes that there is nothing exclusive about the arrangement, but he points out the difficulty of our making comparable arrangements with others because of the inability of our keeping separate in our mind the technical information on wood pulp we have gotten from the Rainier people which we were bound to keep secret and could not disclose to other pulp manufacturers with whom we might deal; and they decide that they will not make such an arrangement with any other wood pulp supplier.

Then in 633 you see the report from Pickens that they have succeeded in making a low viscosity pulp which, of course, had enormous significance in terms of the cost of manufacture of cellophane, and they note at the bottom of page 1289 that Dr. Pickens admits that this low viscosity pulp resulted directly from the assistance of cellophane research and that trial lots of the low viscosity pulp be submitted for evaluation and that their findings, he said, were contrary to the opinions held by their consultants, and then you will notice that Rainier is supplying that pulp to Sylvania as indicated in the last two paragraphs. There was nothing in this that prevented Rainier from supplying pulp they
7998 developed with aid of Du Pont's information to anyone, including Sylvania.

Then you will see that the arrangement is broadened or at least interpreted in 634 so that work can go on in evaluating pulp in connection with the production of Cordura yarn.

As far as effect is concerned, your Honor, the intent being clearly one of developing this pulp, Rainier is shown by these exhibits to simply be one of a number of wood pulp suppliers who were content to make a satisfactory pulp for the making of cellophane or rayon or any other product requiring pulp; nothing in our arrangement kept them in any way from supplying pulp to others, and they did; we ourselves only bought a portion of our pulp from them; we continued to buy from other suppliers. There is not a word in here that these people intend to go into the cellophane business; there is not a word in the Government case that they intended to go into the cellophane business or that they were interested in anything but the manufacture of wood pulp; and it is clear that our technical assistance which involved the contribution of personnel as well as the disclosure of information enabled them to have a business which they would not otherwise have enjoyed and which was beneficial.

Mr. MINICUS. This is all part of a single subject, this Roman numeral we are working on now, and the Government, to
7999 speed things up, would just as soon make a brief answer to it at the end of the entire Roman numeral.

Mr. GESELL. That is fine.

May we take our mid-morning recess, your Honor, before I take up the next one?

(At this point a brief recess was taken.)

Mr. GESELL. Now, the next group of documents is that, your Honor, in the Group 635 to 641. They relate to Union Carbon and Carbide, and I offer these documents in evidence.

("Defendant's Exhibits 635 through 641," inclusive, were received in evidence.)

Mr. GESELL. Now, as to this group, I again would like to recapitulate what I understand the issue to be. Here again we are talking about intent and effect. This is the instance, your Honor, where the Government says that Du Pont utilized its industrial power and prestige to discourage Union Carbon and Carbide from manufacturing a product it thought was cellophane.

And the Court was advised that this is a product that Carbide itself planned to manufacture. At that time we pointed out that the Government was cutting off its documents at the date when there was an indication in our documents that all people
8000 were agreed that this was a glycol celluluose rather than cellophane. And I remarked at that time that since the issue was one of intent, we would have to look at the entire story.

of the transaction, a point with which your Honor agreed in the transcript, saying that you couldn't determine what was the intent unless you looked at the complete story of the relations with Carbide on this product.

So what we are doing here in these few exhibits from 635 to 641 is filling out the story of what happened with Carbide beyond the time covered in the Government's documents.

This first document in 1933 is a report of an interview with Mr. Davidson, Dr. Davidson, and Mr. Rafferty, by Mr. Richter of the Du Pont Company. They refer to this film which the Carbide call Glypflin. You notice how he characterizes it as a product competitive with cellophane. And then in his discussion he points out their claims, better yield, and other claims, greater clarity and brightness, and equal moistureproofness with cellophane, and he talks about relative uses of raw materials and manufacturing costs.

So you can see that there continued to be discussions with Carbide concerning this product after the initial discussions covered in the Government exhibits.

8001 The COURT. Is this charge of Du Pont vis-a-vis Union Carbon and Carbide in the complaint?

Mr. GESELL. It is in this way, Your Honor, the complaint alleges that we suppressed the competition of various potential competitors who sought to enter the business or who were interested in entering the business. That charge appears at 36, I think, your Honor, exerted the prestige and power of DuPont's position in the chemical industry, and so on.

You will see that under F, they charged it induced breach of contracts, and there is another reference to potential competitors in 35, that they had a price policy designed to discourage entry into the industry by potential competitors.

And then on pre-trial, we asked who they were talking about,

And Judge Holtzoff issued an order under which Carbide was listed as one of the people they were talking about. That is the way it comes into the complaint, as I understand it.

Now, the next document bears on this intent issue.

What Mr. McGlothlin has just shown me, your Honor, states that the Plaintiff is directed to furnish Defendant's counsel not later than May 31st the names of competitors and potential competitors who were excluded by the Defendant from the field of manufacturing cellophane.

8002 If was in response to that order that the name of Carbide, among others, was given to us.

The COURT. Just at this point, could you tell me the answer to that mandate?

Mr. GESELL. Yes. The answer to that mandate lists the following companies: In the United States it lists Goodyear, Monsanto, Eastman, Carbide, Marathon, Shenandoa Rayon Company, Visking, American Viscose Company.

And then it was informally amended by Mr. Minicus in his discussion to include also the Transparent Packaging Company.

And then there are a group of foreign concerns listed, such as Comptoir des Textiles Artificiels, La Cellophane, B. C. L., C. I. L., Societe de La Viscose Francaise, Viscose Development Company Limited, Wolff & Company, the German Company.

In connection with that there are the usual caveats by the Government that they are still studying the evidence, and this is simply the best list they can prepare at the present time.

It says the Plaintiff will in the course of its proof show actual exclusions. Therefore, in order to comply with the aforesaid order, the following corporations are named as having been excluded, in whole or in part, from engaging in the cellophane industry.

8003 Now, as to Carbide, we have here a document in 636 and 637 which establishes this simple but pertinent fact, that DuPont had an opportunity of buying up the patents of a man named Lilienfeld, and those are the patents relating to this carbide product, getting the foreign patent, and we did not go ahead and buy up these patents.

You will see the letter to Dr. Bolton from Mr. Yerkes in 637 discussing the patents and the opportunity to buy it, and referring to the fact that Carbide is working with Sylvania making experimental runs of this new film, with quite negative results, it says, and he says we are not interested in buying up these patents under the circumstances. "My judgment would be to tell Lilienfeld as diplomatically as possible that we are not in a position at this time to make any definite decision, that our experimental work will undoubtedly take at least six months."

Had we had this exclusionary interest, one would have expected that when the opportunity to acquire the patents came, they would have been snatched up.

In fact, Mr. Yerkes recognizes that it would have improved our trading position with Carbide. Nonetheless, we didn't do it.

And then you will see that the discussions went on with Dr. Davidson of Carbide—and he will be a witness here, your

8004 Honor,—concerning this matter, and Mr. Yerkes tells him in 1934 that they have been conducting these experiments in a harmonious and satisfactory way. He hopes they have had the fullest cooperation.

Then Mr. Yerkes says, and this is January 1934, "The results of all our trials and experimental work, examination of the patent

situation, and a very sincere and complete effort to compare the physical and chemical properties of the two finished products, have brought us to the conclusion that we would not consider it advisable at this time to attempt to make any permanent arrangement with you for the manufacture of this product."

And then there is a report in the next document which says we had agreed to this experimental work with Carbide; that they also had offered this process to Sylvania—the proof will show they offered it to many other people as well who also turned it down—and then we say as a result of this Yerkes decided we were not interested in the process and so informed Mr. Davidson of Carbide.

And then this is significant on the Government's contention that Carbide was intending to enter this business, it later did admit that their principal interest in glycol cellulose was in finding an outlet for ethylene glycol—that is a product Carbide manufactures, and did not seem to be themselves interested.

8005 In other words, Carbide had a new film for which it used a material that they made. I believe at that time they were the only manufacturer. If they could get DuPont or Sylvania interested in switching to this film as being superior to cellophane, then Carbide was in the position it wanted, because Dr. Davidson, who was the salesmanager, would have lined up a very good account for which he could sell glycol, the basic raw material.

And that explains what was meant in that earlier document of Mr. DuPont that they weren't interested in entering into a competitive situation with DuPont. They were interested, rather, in supplying the raw material for this product.

And then Dr. Davidson, who is a very efficient and persistent man, says in Exhibit 640, he comes back and says to Mr. Yerkes that he wants to know if there isn't some way he can lower the price on his glycol so that we would be interested in going ahead in this business, and he quotes different prices and says "If these prices don't interest you, we would like to know what prices you would like at which we could move our glycol."

And then here comes the final letter, no arrangement as to whether they will make it or will not make it themselves, or anything else. Mr. Yerkes says to Dr. Davidson that he has again considered the whole problem, and he says, "I regret to say

8006 that I can only repeat to you what I have said before, that we are simply not interested. This may, perhaps, sound a little blunt, and I assure you that it is not meant in any sense in that way. I know that you desire a definite and direct answer from us, and this I am endeavoring to give you.

"I appreciate very much the many courtesies which you have shown during these many discussions."

He gave it to him in 1934, that they weren't going to do it. And he came to no different conclusion that Sylvania came to independently, and the other concerns, the proof will show that Carbide took this same business too, reached independently. It was not a product that they wanted to manufacture.

Now that goes then, your Honor, to show what this transaction really was. It shows that we were not seeking to exclude Carbide. And I point out that this product is one quite comparable to cellophane in many of its characteristics and qualities, and if our view of the market is correct or even if Mr. Minicus' new position about fibrous and non-fibrous material is correct, this is affirmative to us on the issue of intent, because we did nothing here to suppress another non-fibrous film from coming into the market under Carbide's aegis with comparable characteristics to cellophane. We didn't even seek to take up the patents when they were offered to us.

8007 So as to intent, the intent is one of seeing the two products and reaching a business decision as to what to do, and nothing more.

And as to the effect, I am afraid the effect is that Carbide lost a chance to sell a lot of glycol. I do not believe anyone has ever made glycol cellulose as a wrapping film in any quantity up to the present time.

And the last paragraph, your Honor, of DX-639, the last sentence of the first paragraph, shows that we knew, we realized potentially what was ahead when we reached these decisions.

It says the matter was put up to us pretty much on the basis—this is by Carbide—that if we did not utilize this process, i. e., make a deal with Carbide, they would go into business themselves and thus furnish another sheeting competitor.'

The COURT. Can you identify DX-639 for me? How does it come into existence?

Mr. GESELL. That is a minute, your Honor, of the Board of Directors of the company reporting on this item. And here, having told the Board that Carbide said they were going to go in and be a sheeting competitor, we decide we are not interested, and we made no deal. So much for that.

Now, as to Visking Corporation, we have a larger

8008 group of documents that cover the group from 642 to 657.

I wish to offer those exhibits at this time.

("Defendant's Exhibits 642 to 657," inclusive, were received in evidence.)

Mr. GESELL. Now, the issue as to Visking, I gather, is a somewhat different one. The Government contends that we entered

into a contract with Visking which divided fields, and which was illegal in that it kept Visking from entering into the cellophane business. That was a contract under which Du Pont licensed patents and technical information to Visking for the manufacture of tubing. And we received technical information and patents under the agreement from Visking as to cellophane sheeting. There was no limitation in the contract, your Honor, which prevented Visking from making cellophane in any form as long as they used their own patents and their own information. They were barred from using our patents and our information.

That division of fields through that contract is, according to the Government's contentions, illegal, and it said that Visking was a potential competitor that we kept out of the business.

Your Honor will recall that Visking, as I stated to the Court, was a company that was organized at this time in which Du Pont had a share interest, in which we lent technical and business
8009 support of various kinds, and that it turned out to be a very successful enterprise in making these sausage casings and other types of tubing.

Now, I would like to call your attention particularly to Exhibit 645-A. This is a letter to Judge Frank of the CCA 2nd, from Mr. Freund. It was written in 1942, and your Honor will see that at Page 1306 the letter was sent to us by Mr. Freund and comes from the Du Pont files.

Now, in the latter sections of this very interesting letter, Mr. Freund discusses his views about the patents laws, and why—and how they should be administered, and we aren't interested in that at all as far as the case is concerned.

We are interested in the first 10 pages of the letter, which go up to the paragraph starting "That's my story from the invention and patent angle."

Now, before turning to the text of this letter, I want to make clear, your Honor, why we consider it significant. In the first place, Mr. Freund is dead. He is not available as a witness. And he was the organizer and developer of the Visking Company in the entire period in which we are interested. He is, in other words, the man who was suppressed, if anybody was suppressed, on the Government's theory.

Now, second, the Government relies very heavily on two letters of Mr. Freund, letters which, of course, we couldn't cross
8010 examine, and on which they placed enormous emphasis in developing their theory of exclusion.

One is GX-443 at Transcript 3210, where Freund suggested in 1923 that if we would sell the Cohoe patents to him, which we didn't do, and then he licensed us back for cellophane, we would be eliminating a potential competitor.

And the other is GX–4134, written January 22, 1945, in which an exchange of expressions of good will between the two companies attendant on the cancellation of the agreement was presented by Mr. Roache and others at the Government table as a sinister reference to a deep underlying conspiracy to continue divisions of fields and anti-competitive arrangements past the termination of a formal contract.

Now, this letter describes how Visking came about, who Freund was, what he did, and what Du Pont did to help him. Starting at Page 2 and going to Page 10, you have this man's review in this letter, it is a personal letter, of his development of this business, and how his relations with Du Pont came about.

I hope your Honor will read these pages at some moment before we come to the decision in this case.

The COURT. I intend to read everything.

Mr. GESELL. I am sure your Honor intends to read them all, and this one is one that we trust will be starred for particular consideration.

8011 He points out that he started way back in 1907, he had been employed in his father's company, which was animal sausage casing, an animal sausage casing company, and he had worked in various ways up in the company as a youngster, having been to the Armour Institute of Technology at the University of Chicago, and that everywhere he went he came more and more to the conclusion that animal sausage casings were very defective and unsatisfactory to the buyer.

And then he was sent to London, and in London he was reinforced in that view, and so he started out in his bedroom at night to see if he couldn't figure out some way of making a synthetic sausage casing.

He didn't have any facilities at his disposal, and as he says, he was a true garret inventor. He had had some education, he says on the third page, in chemistry, and instead of eating lunch he set up a secret laboratory in an unused toilet in a warehouse of his father's business, and went up there and continued trying to find out some way to develop a seamless tube sausage casing; that he corresponded with different people; that he worked with his former professor in chemistry, and then he made contact with the Mellon Institute of Industrial Research, and they put different people on it at various times, he financing their work, and working closely with them, as he says, at a great sacrifice to his wife and himself.

8012 And finally, after a great deal of time, as he says, 15 years of self-denial and disappointment before there was an inch of satisfactory casing, he found a man who worked at Mel-

crease consumption of its patented and other new products by aiming at a low profit per unit on a large volume of sales rather than a high margin on a small volume"; and we have seen the operation of that policy in the development of the cellophane business. It points out that patent protection is useful in carrying out that policy.

There are provisions with respect to employees' relations on inventions, guarding the secrecy of non-patented inventions and as to foreign patents you will find a discussion of the company's policy in not taking out foreign patents unless there is an opportunity to license them abroad because of the expense, and so forth, and a direction against entering into further broad patenting and processing agreements with foreign concerns after 1938.

In the responsibility of patent applications I call
8044 your Honor's attention to 1385 which shows the procedure through which patents must go before they are applied for. They come up from the department, they go through legal scrutiny, and they go to the Patent Board. That will become pertinent as we get further into this patenting question with the testimony.

Now, still in this policy section, going over here up through 74, we have a few documents which are of general interest and relate to some of the matters which the Government has so frequently stressed. The first group of them, your Honor, relates to this question of the defensive patent policy. You may recall that the Government has taken that term to comprehend everything evil that they think there is in the patenting practices of a large concern. They point to it as proof of blocking and fencing and competitive intent, and so forth, and I said at page 2369 of the transcript that that merely referred to the fact that Du Pont sought to take out patents on its inventions in order to retain the freedom to practice those inventions should that become desirable, and that there had been many instances, a number of instances, where some of its own inventions were taken by someone else where Du Pont failed to apply for a patent, and hence the development of the term "defensive patent policy" as indicating a policy of patenting in order to maintain freedom to practice its own inventions;

and here we have brought together three examples in De-
8045 fendant's Exhibits 663 to 669. They are the documents——

Mr. FITZPATRICK. Excuse me, Mr. Gesell. We have an objection, which is not too important, but for the purpose of the record I would like to make it with regard to 664 to 668. Those documents relate to a patent which does not concern cellophane. I believe it is a rayon patent. But at any rate, the answer by the defendant to the Government interrogatory No. 402 which is in

evidence does not list this patent as being one of those which pertains to cellophane or caps and bands.

Mr. GESELL. In this group from 663 to 669 you will see in 663 that Du Pont's chemist, a fellow by the name of Blair, experimented with cellophane sealing in the Spring of 1928 and the strength of sealing which he was able to obtain was not thought at the time to be sufficiently tight and rugged, and no patent was applied for. Then, as the evidence already showed, the Humitube Company did apply for and obtain the Neumiller patent mentioned in Defendant's Exhibit 663, and that covered broadly solvent sealing of moistureproof cellophane and the result was that Du Pont was blocked by its failure to apply for a patent on the sealing that Blair had invented, and you recall the evidence showed in GX-2178 that the Humitube and Dobeckmun patents were purchased by Du Pont for I think it was $35,000 in 1931.

8046 Then the next five exhibits, 664 to 668 cover a different situation. There a Du Pont casting machine operator conceived the idea in 1934 of using stroboscopic charts for timing the speed of a rayon spinning machine. That is a device that is also, I understand, useful in cellophane casting machines for determining accurately the speed of the rotating rolls. The Du Pont patent people thought the invention was anticipated by the prior art by the use of discs to determine the speed of the rotation of the phonograph records. That appears from Defendant's Exhibit 664. Three years later in 1939 a patent covering this same device was issued to an employee of another rayon company, and a careful search of the patent literature failed to support the earlier judgment that they had made, as you will see from Defendant's Exhibit 665, and a license had to be obtained from the patentee.

You might note in passing on that in Defendant's Exhibit 668 a statement of policy which indicates the standards used by Du Pont patent service in deciding whether or not to apply for a patent.

The third illustration is Defendant's Exhibit 669——

The COURT. Before we leave 668, what about Mr. Fitzpatrick's objection as to relevancy?

Mr. GESELL. Well, it seems to me, your Honor, that since we are concerned with the application of—with an understanding of the practices and policies of Du Pont and what was meant by

8047 the words "defensive patenting" we certainly are close enough to it in an instance that arose in the same department as cellophane, the Rayon Department, and also I stated to the Court that I understood this patent had some pertinency to the cellophane casting machines and that it could be used

The COURT. Do you want to be heard after lunch?

Mr. ROACHE. Yes, your Honor.

The COURT. Recess to 2:15.

(At this point a recess was taken until 2:15 o'clock p. m., the same day.)

2:15 O'CLOCK P. M., THE SAME DAY.

Present: As before noted.

Mr. ROACHE. First, your Honor, I would like to call your attention to Defendant's Exhibit 623, which is a chart of the assets and sales of five largest wood pulp suppliers. I call your attention to the assets and net sales under Riordon Sales Corporation, and note that the assets and sales are actually the assets and sales of the Interntional Paper Company and not those solely of the Riordon Company.

8021 I would like to point to a few of the defendant's exhibits relative to all this aid Du Pont gave to Rainier that was worth so much. The very first exhibit on this point, 624, down at the very bottom wherein Du Pont is writing to the Riordon Corporation, it states, "It is natural that we shall want to do whatever we can to help you to make a raw material which is more suitable for our business and we stand ready at any time to deliver to you prompt service in testing experimental samples and offering suggestions as to possibilities of making improvements in your product for our purposes. We invite you to come to see us to discuss these matters at your convenience and trust that we may be able to be of assistance to you along these lines.

"We are doing no more for the Riordon Company in this than we would do with any progressive manufacturer of wood pulp for viscose and we realize that you, on the other hand, have the privilege of getting similar help from any other manufacturer of rayon."

This is the type of cooperation that was similar to that given to Rainier. They state that they would help them with testing samples and offer any suggestions that might improve Riodon's product for the use of Du Pont; and you compare that now with Defendant's Exhibit 630, where starting in the second paragraph—it is a letter from E. K. Gladding of Du Pont to Dr. Sparre:

8022 "Briefly, the original intent" this is the intent in the Rainier-Du Pont agreement—"was to effect a cooperative arrangement between Du Pont Rayon and Rainier to improve sulfite pulp for the manufacture of the products which the Du Pont Rayon Company produces; i. e. viscose and acetate rayon, cellophane and other similar cellulose products such as caps and bands; also other products based on cellulose which the Du Pont Rayon Company may in future manufacture."

Then it goes on to state that the Rayon Company was to furnish technical assistance and the loaning of personnel, specifically Dr. Pickens, and run tests and advise results and suggest ways that the product could be improved, which is just the same thing they said they would do for Riordon, excepting giving them personnel.

Now, going to 625, the statement was made that there was an awful lot of work that had to be done with Rainier before they could develop a product that Du Pont could use in rayon and cellophane. And here down at the bottom it says "We have discussed this question——" Let's start at the beginning of the paragraph. "I do not think that the pulp as they make it today will be properly blended to meet our requirements for cellophane. At the present time they are using an 85 ton tank for blending purposes, but the tank is located back of the bleaching operation. This is all right from the point of view of paper manufacturing, but it not at all acceptable from our point of view because of the in-
8023 fluence that bleach has on the viscosity. We discussed this question with Mr. Davies and he thought it would be perfectly possible to alter the arrangement so that the material could pass into the 85 ton tank after it was bleached, just prior to going over the paper machine. Under these conditions we think probably their pulp as it is made would be acceptable for cellophane."

So that at the very beginning all they did was alter this process a little bit and the pulp was suitable.

Now, 634, it is a letter from the Du Pont Company to Dr. Pickens, then of Rainier. The second paragraph, and this is another Du Pont interpretation of how much assistance they gave Rainier, the second paragraph, "After reading the contract, we are in agreement that the present arrangements, whereby the Chemical Department are doing work for the Rayon Department, directed towards investigation of pulps, will be handled by Rayonier and the Du Pont Company on the same basis we have handled other exchange of technical information in the past. In other words, we will pass on to you any information which will be useful in the manufacture of pulps, and will retain for our own use information regarding the manufacture of rayon from pulps supplied by you."

It seems to be also what they offered Riordon, and there was no talk of any special rebates at that time.

Now, what did Dr. Benger, the Chemical Director of Du Pont, say relative to this information they gave Rainier
8024 that was contained in Government Exhibit 4448? At page 6210 there is a letter from Mr. Horsey to Mr. Yerkes, wherein it states, "Dr. Benger states that he believes that representation exaggerated somewhat the amount of development and

research work that Du Pont had done with pulps for the purposes mentioned," contrary to their original statement to Rainier that it had carried on extensive research work and experiments with respect to the development and improvement of sulfite pulp suitable for rayon and other cellulose products.

Mr. GESELL. Your Honor will just note our contentions are borne out by 6211 of the exhibit he just read.

Mr. ROACHE. It is another instance of Mr. Gesell not reading the whole document.

Now, your Honor, regardless of whether or not this assistance given Rainier was worth all the money Du Pont received, which we say, of course, it wasn't, because after all, what difference does it make whether you do give some consideration, you are not entitled to these discriminatory rebates anyhow. Such receipt on the part of the defendant of the rebates on material purchased is in violation of Section 2A and 2F of the Clayton Act.

Section 2A states "It is unlawful for any person engaged in commerce to either directly or indirectly discriminate in price between different purchasers of commodities of like grades of commodities.

8025 The different purchasers were Sylvania and Du Pont.

Section 2F states "It shall be unlawful for any person engaged in commerce to knowingly induce or knowingly receive discrimination in prices prohibited by this Section."

This discrimination is prohibited by Section 2A, and 2F makes it unlawful for Du Pont to receive it.

So that there is no doubt that Du Pont knowingly received it, and the Government exhibits bear out the fact that they induced such rebates.

We do not charge a violation of the Clayton Act, your Honor, but we point it out as one of the unlawful means Du Pont utilized to maintain its monopoly.

Now, the Government's main contention relative to Rainier, which was proved unquestionably, was that Rainier was excluded from the manufacture of cellophane by Du Pont. The contract, Government Exhibit 4008 between Rainier and Du Pont excludes Rainier from the manufacture of cellophane, and Government Exhibits 4006, 3, 4, 1, and 7, all negotiations leading up to the agreement, prove it was Du Pont's intent, and it was well settled, that Rainier was to refrain from the manufacture of cellophane.

Government Exhibit 4007, a report from the technical department to the executive committee which discusses the contract specifically says, "I call attention to Article XV, the latter

8026 part of which is designed to prevent the Rainier Pulp and Paper Company from going into the manufacture of rayon

or cellophane and without positively so stating. I question the effectiveness of the wording. On the other hand it is possibly the best wording that will cover the point without possible future complications with the Clayton Act."

This Exhibit 4006, Government's Exhibit 4006, 3, 4, and 1, all definitely state under the terms of the agreement the Rainier Company wouldn't directly or indirectly engage in the manufacture of rayon or cellophane.

This was the Government's main contention relative to Rainier, that Du Pont by agreement excluded Rainier from the manufacture of cellophane. This was a restraint of commerce perpetrated to enable Du Pont to maintain its monopoly position in the industry.

Now, relative to the Carbide and carbon situation, if you will recall, your Honor, the Government introduced its exhibits relative to Union Carbide and Carbon to show how Du Pont utilized its industrial power and prestige in its relations with this company.

The exhibits here introduced into evidence will prove that with the intent to keep this potential competitor from manufacturing cellophane, Du Pont brought its prestige and power into play to discourage Carbide and Carbon, one of the largest chemical
8027 companies in the United States, from manufacturing a product that Du Pont believed was cellophane.

This was shown in Government's Exhibit 4381. We followed Du Pont's actions step by step from the time it discovered that Carbide and Carbon had something that Du Pont thought was cellophane, down to the point where it was established that the product was glycol cellulose. At that point it left the field of cellophane, and we did not put in any more evidence, as we were only interested in Du Pont's activities with regard to this material, as long as they continued thinking it was a product of regenerated cellulose, but once Du Pont found out it was not, the rest of the Government's exhibits would have been immaterial to the case if we would have put any in.

I would like to call attention again, your Honor, to Government's Exhibit 4831 when you read that exhibit. That shows how they used their power with Carbide and Carbon.

Now, relative to Visking, the Government in this instance charged there was a division of fields by an illegal conspiracy, and that thereby Visking could not manufacture sheet cellophane. That was the result of this conspiracy between Visking and Du Pont.

Now, Government Exhibit 4442 was a good example of intent. In this letter from Sparre to Yerkes telling of the
8028 talk with Dr. Weglein, a director of the Mellon Institute,

who had been working for Freund or Visking, and was talking as his representative, and stated that Freund had developed a superior method of manufacturing cellophane, and stated they couldn't manufacture without infringing the Cohoe patents, which Du Pont owned.

Sparre stated, and I quote, "I stated that we considered cellophane sheets as our special business and if we made any arrangement at all in connection with the Cohoe patents, it would only cover the manufacture of tubes, so that Viscose in sheets would be reserved for the Du Pont cellophane company."

And what did Freund say relative to this? In Government's Exhibit 4443 Freund writes to Sparre and asks to buy Cohoe patents and he would agree not to make viscose sheets or any other products made from sheets, thus eliminating a possible competitor.

Government Exhibit 4089 is the contract specifically setting forth the division of fields, in Paragraph 4 and 5 of the contract.

Now, relative to Defendant's Exhibit 644, dated 1931, this is the document Mr. Gesell stated which showed that there was no division of fields.

Now, Government Exhibits 324 and 4093 both interpreting the relations of the contracts will show differently. Govern-
8029 ment Exhibit 324 from May to Yerkes, 1933, approximately two years later, discussing the contract with Visking says, "In our general relationships with Visking, we have tried, and I think successfully so far, to establish the general principle that in the field of viscose we will keep out of their pasture and they will keep out of ours in all its broad ramifications."

And then Government Exhibit 4093, the development department to the executive committee, ten years later after the contract, under the heading "Effect and Limitations of Present Contract," "in making use of this common stock of information, Visking must confine its activities strictly to the manufacture and sell of sausage casings; and on the Du Pont side the obligation is recognized to refrain from any invasion of the sausage casing field. This interpretation of the not very explicit language of the contract is fully confirmed in the ten years of practice which have taken place under it."

I do not think that there is any more that has to be said on that point.

8030 There is a document, however, before leaving I would like to bring to the Court's attention, Government Exhibit 645——

Mr. GESELL. You mean defendant's.

Mr. ROACHE. Defendant's exhibit. The exhibit from Freund of Visking to Judge Jerome Frank. It is really a hearsay docu-

ment. We did not object to it. I really don't see its relevancy to the case. But in this document Freund was attempting to give Judge Frank his impressions of what the Judge should write in his article, and I read some things in this exhibit which Mr. Gesell did not bring out. Freund seemed to have a big complaint about the patent situation. He complained of the patent laws. There wasn't enough protection there for him. It only gave you seventeen years and then everybody could come in. He complained of the anti-trust laws. Freund had been fixing prices. He seemed to have a big complaint practically all through this document.

But there is something else that was brought out in it and it was brought out by Mr. Gesell, what an aggressive man Mr. Freund was. This man never gave up. When he set his mind to something he really went after it and did it in a big way. This man had a college education; he worked with his father; he was president of the Oppenheimer Animal Casing Company, and after that he went directly to the Independent Casing Company and was vice president of that company. So he was a man who knew what he was doing and he was not just somebody out in the
8031 street that Du Pont picked up to form this Visking Corporation. Here was a real, aggressive man. This would have been a nice man to become a competitor in the cellulose field. but he could not, not with that contract they had dividing the field. There was a good man to become a competitor.

Mr. GESELL. Now we come to patents, your Honor. They are in Section Roman numeral VIII and they cover the rest of this Volume 5 of our exhibits. It is the group of documents running from 659 through 731. Our contentions concerning the patent aspects of the case appear in our trial brief under Roman V and Roman VI. We begin over on page 17 at No. 49 and run over to No. 67 on page 23. These documents are concerned with only a very small portion of that patent defense or patent position. Of course, the single essential aspect of the defense is now conceded on the trial; that is, that Du Pont owned basic patents covering the product and processes for the manufacture of moistureproof cellophane; that those patents were of Du Pont's own invention; and that they were in effect throughout the period the Government directs its attack upon. We have relied on those patents; we have relied on them from the beginning of this law suit in the answer, pre-trial, at the opening, and throughout the Government's case and our own. We think that position is solid and good. The Government has constantly avoided it, never come to grips with it, never answered our trial brief dealing with
8032 the issue, never dealt with it at all in any of their documents, and it stands there as the cardinal single fact.

Now, apart from that the Government makes a whole series of charges, most of which, as I see, have no bearing upon the validity of that patent defense. First of all, they talk about the aggregation and engrossing of patents and monopolization of technology. As to that our documents cover a portion of our position: We have already shown the origin of most of our patents in the brief sketch about research which we will fill in with witnesses, and we are going to have witnesses dealing with the actual invention and patenting of various discoveries that were made who will carry that story on through, taking up with the Court what projects they were engaged on, why they were engaged on them, what inventions they made, what standard governed the practice in patenting, and so forth.

We have here dealt with that issue only to this extent: By our documents here we have documented every example where Du Pont acquired a patent from someone else. There were some examples of that in the Government's case, and we have gone ahead and taken every instance where Du Pont acquired a patent, whether it be from some of these so-called foreign associates or whether it be from an insolvent company or somebody else in the United States, and we have shown why that patent was considered important.

8033 The COURT. I am not to be called upon, am I, to probe into these patents the same as I would in an infringement or validity case?

Mr. GESELL. At this stage of the trial they are all valid, your Honor.

The COURT. I see.

Mr. GESELL. The Government has made no attack on the validity of any of the patents.

The COURT. I did not express myself clearly. I mean is your explanation of the patent going to be the same as it would be if we were trying a patent case?

Mr. GESELL. No. My purpose is going to be to show two things, your Honor: One, the question of why were patents obtained? Were they obtained as a result of normal invention and normal patenting practices? and did we acquire patents from others because we thought there was some reason we would need them and could use them or did we do it to monopolize and engross this field? That is the first issue.

The COURT. In other words, there is no issue drawn which attacks the strength or weakness of the patents as such?

Mr. GESELL. That is what I understand.

There are charges in the complaint which were washed out on pre-trial of assertion of patents of doubtful validity, but that has

been shifted around now under the pre-trial where the Gov-
8034 ernment says they attack the validity of no patent in their case in chief, but they reserve the right on rebuttal to attack the validity of any patent on which we rely. So we still are confronted with the prospect that this may become a basic patent suit directed to the question of validity of some several hundred or a thousand patents. But today——

The COURT. If that occurs you will have to have a sur-rebuttal, then.

Mr. GESELL. I will then have to have a sur-rebuttal, your Honor, if the Government comes forward with any proof. But in their case in chief they did not attack the validity of any patent.

Now, the first point, then, has to do with the intent and the nature of the acquisition and aggregation that the Government is talking about; but there is another point that comes a little closer home to your Honor's question. We must look at these patents, your Honor, sufficiently to determine whether or not they were patents which were of consequence here in this art and had an exclusionary character or whether they were patents that were merely wrinkles that had no basic significance. I think, for example, where it comes up the most sharply is that the Government says in the settlement of every patent interference suit we made an agreement to keep Goodyear or Monsanto or Eastman or who you will out of the cellophane business. Your Honor will have to look
8035 at those patents sufficiently to find whether or not the patents had any real relationship to the ability of those concerns to enter into the cellophane business or whether they were, as in fact they were, a mere patent relating to one of many alternative methods of coating or a patent relating to the use of aluminum rather than some other kind of metal in the rolls that go through the driving machine; because, you see, the Government jumps from the fact that there was a settlement of the interference as to a cellophane patent which recognized areas of right to the two parties to the conclusion that that was an agreement that barred the person entirely from the manufacture of cellophane.

We had an excellent example of it with Mr. Roache a moment ago that because we licensed Mr. Freund under the Cohoe patent and did not give him rights to use Cohoe to make cellophane, he immediately jumps to the conclusion that without Cohoe nobody in the world could ever make cellophane sheeting.

Mr. MINICUS. I join with Mr. Gesell in asking your Honor to look at that patent and see what that patent has to say about sheet cellophane. It has nothing to say about sheet cellophane, your Honor.

Mr. GESELL. So that is why we want you to look at the patents and see what their significance is as against the charge.

Take the ribbon situation, the ribbon patent situation. There we have an agreement that the Government attacks very vigorously involving the licensing of some patents pertain-
8036 ing to the use of plain cellophane and for the product resulting in the manufacture of ribbons that relates to about one-tenth of one per cent. of the business. Now, the question is whatever that agreement was, whether it was lawful or illegal, what could possibly have been its effect upon Du Pont's position under its moistureproof patents here of broad basic coverage? So your Honor is going to be required to examine, I think, in a general way the scope and nature of the claims of some of these patents. We hope to assist the Court in that direction by putting on the stand a witness familiar with the patents who can discuss them by way of group and illustration and individual ones as to their significance and nature in relation to this matter. But our basic contention is, your Honor, that we had these broad initial patents as to moistureproof which stand inviolate here in this case, and if we are held to have had any illegal monopoly it will be the first time in the history of the Sherman Act that any company owning a basic broad product patent on a product is found to have illegally monopolized that product. There is no such case, and of course the departure that that involves in our whole notions as to patent law is apparent to your Honor.

On the aggregation and engrossing we intend to show the circumstances under which some of these patents were acquired, and part of that is covered in the documents. On patent issues
8037 we have mostly, I think, a legal issue: Were specific agreements lawful or were they not lawful? Then if the Court should decide as to any one that it was illegal, the question that is to be appraised is What was its purpose and what was its effect upon Du Pont's position?

As to the Sylvania agreement we are offering facts here in the document pertaining to the operations of that agreement which bear on its effect.

On the interferences we are not offering any documents. We will offer testimony. The Government takes the position on the interferences that the illegal intent is shown by the terms of the agreements themselves and that you could read the four corners of those agreements and find proof of illegal monopolistic intent. We take the position that you can't; that they are proper agreements on their face; there is no proof of illegal intent from their four corners or otherwise; and the circumstances under which those interferences were handled can be covered in part by testimony.

We do deal in these documents with specific situations; we want to show a cancellation in some instances where that is not shown by the Government's evidence; we want to show related licenses in some cases and to a considerable extent our patent documents merely fill in the proof and set the stage by having the necessary materials before the Court for the testimony on this phase of the case which is to follow.

8038 Now, the first group of documents, your Honor, is under the heading "Policy" and they cover the group from 659 to 674, and I now offer them in evidence.

(Defendant's Exhibits 659 to 674 were received in evidence.)

Mr. GESELL. If you will glance at the first group of this beginning at 659 you will see that we have presented there to the Court a series of formal resolutions by the Du Pont Company, first the Du Pont Cellophane Company and then by the main company itself, establishing patent policy for the guidance of the company and its subsidiaries. These documents show the formal policy which governed the activities of the people in the organization concerned with patent matters. 659 is of minor interest. It shows the policy with regard to infringing patents of others and indicates a recognition of other people's patents and the policy against infringement except upon clearly proven cases of invalidity.

660 shows the Executive Committee retaining control over the patent licensing agreements, and that, of course, is pertinent in judging what the scope and character of the agreements are, because we may look at the documents that go to the Executive Committee and determine what the understanding was that was submitted for their approval.

The basic and more important documents are those covering the patent policy from 1938 to date where the Executive Committee adopted a full policy statement on many aspects

8039 of patenting and patent procedure which are germane here to the issue of intent and the issue of conduct.

I am going to discuss 662 which shows the Executive Committee action of November 2, 1938, with amendments up to April 2, 1947.

The COURT. This has nothing to do with this case, but I have an indirect interest. Can you tell me if there is anything in the declaration of policy which has to do with patent litigation? Is there any guide or rule laid out as to when Du Pont goes into court and when it stays out?

Mr. GESELL. No, but there are discussions of when they will take the chance of running a court action.

The COURT. Yes, I have read that as we passed it. If they were of the opinion that they did not infringe, they shall keep

on infringing or stand the chance of being charged with infringing.

Mr. GESELL. Yes, but there is no discussion in this patent policy of when they will initiate patent suit.

If you will follow through with me on 662 I can point up some of the points that seem significant to us, your Honor. That starts at page 1375 of the exhibits. The first, of course, is a preamble pointing out that these are the principles of patent policy which have become established in the company's experience over the years and emphasizing the necessity of following some
8040 policy because of the diversified line of chemical products that are developing in the industry; and the first significant point is When do you file for an invention? There the company points out that experience has shown that ownership of inventions cannot be safeguarded by attempting to maintain secrecy, and that public use in plant operations is not a practical means of preventing others from obtaining letters patent; and that since large sums of money are being spent on research and development work prompt filing of patents on patentable inventions is desirable. Of course, they must rely on secrecy and secrecy alone where the inventions are not patentable.

Here it sets up four specific standards to guide in the applications for patents. Obviously inventions that the company is practicing or intends to practice, auxiliary inventions covering modifications which may be found practical, inventions covering uses, and then inventions that may be a source of income through licensing; and then there is a licensing section on the next page which sets up the standards that should in general apply in determining whether or not to license an invention. Obviously, they point out it is a question to be determined in each case, but their interest is in practicing their inventions themselves rather than exploiting them through licensing; but that where it is not likely that they are going to be able to use them themselves or where they can't meet the requirements of the market themselves, then
8041 they are prepared to consider licensing and fair consideration should be given to their request.

You will note at the end there that the Committee says, "In order that this Committee may be familiar with negative as well as affirmative actions in respect to granting licenses under the Company's patents, the departments concerned shall report to the Executive Committee all cases where requests for licenses are refused."

They emphasize that they are particularly loathe to license in cases where they are developing and promoting a new product or process and where the licensing of additional production

would be unsound if they can already supply the market themselves.

Then there is a section dealing with conditions and restrictions which the company does not look with favor upon. Tie-in clauses are specifically mentioned in (a) in this document that was written in 1938. You remember the Government referred to documents in 1933 which they say were indicative of tie-in. In 1938 the policy is specific that no license shall be conditioned upon the use of the company's products.

Price control is another matter. They state, "While the prevailing view is that it is permissible, in licenses under process patents, to fix the price at which the resulting product may be sold by the licensee, uncertainty as to the soundness of this
8042 view makes it preferable not to attempt such control."

In 1938, your Honor, that is pretty forward-looking patent policy.

The COURT. United States versus General Electric has not yet been overruled, has it?

Mr. GESELL. Not yet. They are getting close.

In (c) there is the question of requiring admission of validity beyond the continuance of the license itself. That bears on whether my interpretation of the Marathon contract is correct or whether Mr. Minicus' is correct, a subject that we debated at great length in connection with Government Exhibit 2889 in the transcript.

Then you will see this statement at the top of page 1378:

"It is legally permissible for a licensor, at least where the patent covers the product, to control the licensee's selling territory, output, method of marketing, and selling price. Nevertheless, price control should not be imposed unless the validity of the licensed patent has been established in litigation or in the opinion of the Legal Department is beyond reasonable doubts"—and the reasons for doing so are fully explained.

In cross-licensing the company is careful to point out that it does not look with favor on cross-license agreements which
8043 contain these restrictions as to price or tie-in or admissions of validity beyond the scope of the period of the license. They point out the advantages of cross-license agreements in certain situations. With respect to the acquisition of rights I don't believe there is anything that is pertinent here. This repeats the infringement discussion which was in the earlier one and a company statement, your Honor, as to price policy in connection with patented products is of some significance at the top of page 1382 that "The general policy of the Company, as stated in the 1937 Annual Report to the Stockholders, is to endeavor to in-

for determining the speed of the rotating rolls, and I think Exhibit 665 states that in the bottom part of the second paragraph at page 1392:

"* * * and they may or may not hold some interest in the future for nylon and acetate spinning machines and for cellophane casting machines or for any other machine where the speed of rotation needs to be determined quite accurately."

We are merely concerned here with showing concrete instances that arose in the company, the reasons for the company's policy of taking out what are called in some of the documents "defensive patents."

The COURT. I have not been able to find that cellophane reference in 664.

Mr. GESELL. It is in 665 at page 1392. It is at the bottom of the second full paragraph, page 1392.

8048 The COURT. Mr. Fitzpatrick, I am going to reserve ruling on your objection at this time. Make a note to bring it to my attention at some later date.

Mr. FITZPATRICK. Yes, your Honor.

The COURT. I want to see if there is any further relevancy of these particular documents to the case.

Mr. GESELL. In 669, your Honor, is the third example that relates to the Dalton Window Band Patent. The window band is the band with the alternate transparent and opaque sections used for covering tax stamps. And we had some discussion of that in relation to some of the caps and bands aspect of the case.

This exhibit shows that Dalton had a patent relative to these bands, and that Du Pont had considered filing an application as early as 1936 covering that feature mentioned therein, and hadn't filed it because it thought that the prior art covered it, and there would be a statutory bar because of the German patent. But Sylvania eventually obtained the patent, and we were obliged to take a license from Sylvania, as shown by GX-2296.

That is one of the band patents which enabled Sylvania to obtain a royalty-free license from Du Pont, while the same patents were licensed to Ceylon at a royalty.

In 670 and 671, there are examples of the Du Pont policy of obtaining patents in order to secure freedom for its customers in connection with the expanding use of cellophane.

8049 670 is a memorandum by Yerkes authorizing the purchase of the Wertheimer Ribbon patent.

671 is an evaluation of a bag closure patent which was obtained to give customers freedom. The last two paragraphs of Exhibit 671 are pertinent. It says "The purpose of this group of patents is not to profit directly from a monetary standpoint,

but to aid in the expansion in the use of cellophane bags and thus increase the volume of cellophane used for this purpose.

"By taking out the patents ourselves, we preclude the possibility of someone else doing so and having this serve as a hindrance to our contemplated progress. It would seem logical to issue licenses for their use freely to cellophane converters and users."

Again going to the proof that is already in, that our interest was in making it possible for people to sell and use cellophane.

Then we have several documents, your Honor, that go in a general way to this tie-in question.

In 672 and 673 and 674, you will find documentation pertaining to that.

Now, just going back a ways, your Honor will recall that there was in the case no example of tie-in, as such, there was no specific tie-in. The Anti-Trust Division conceded there was no express provision for tying in cellophane sales, at 3091 of the tran-
8050 script and it was also conceded that the Government's documents do not show that the 30-day cancellation clause, which they relied on as proof of tie-in, was ever exercised.

We had a discussion of that at Page 3097, and I think when that whole question was up, I pointed out to the Court that there was no evidence or communication of the alleged tie-in restriction to customers.

And I asked the Court to keep an open mind on it because of the additional proof that was coming along. Now, here is some of the additional proof pertaining to that.

You will see that in 672, 673, and 674, express statements with respect to similar 30-day cancellation clauses, that they are not intended to be or are not to be used to tie in sales.

In the 60-day cancellation clause in 672 it was used in licenses to converters under the hosiery packaging patent. And you will see the quotation on Page 1405 where Dr. DeRight quotes a letter by Mr. Daley with respect to tie-in provisions, and the Company policy on that.

There is also in DX-673, in the middle paragraph on Page 1407 that starts, "I understand," again a discussion of the cancellation situation, and a statement that the cancellation clause is not in any degree intended as a threat against the license with respect to the source of unpatented material.

8051 674 indicates Du Pont's reluctance to sue any infringer of a customer use patent. There were very few of such suits, and those were under the special circumstances, particularly in the Humitube case, which we have already explored. You tie that general language in some of these documents, which come along here in 1940, 1941, 1942, with the statement I called your

Honor's attention to in the 1938 patent policy, and in the light of that the examination of the instances in 1933, to which the Government makes constant reference, certainly are watered down in terms of their consequence or proportion.

And there is a further basis for a finding that the implications that the Government seeks to draw from the cancellation notice are not borne out by the company practice or policy.

We now come, your Honor, to a big group that goes from 675 all the way over to 710. A group of about 35 exhibits, which are at the beginning of this group under VIII–B relating to practices.

676 starts the "Practices" group of documents. Now, this group that goes from 675 to 710 are the documents I mentioned a moment ago that fill out the Government's case, documenting the reasons for the acquisition of various patents, and showing the significance of particular patents acquired.

8052 Your Honor will recall that the Government's attack is primarily a statistical attack on the number of patents acquired from outside sources. It points to the fact that there were a large number of patents acquired, and a lot of patents weren't used. And from that it argues statistically that the facts, to use their words, pertaining to the relative number of patent rights acquired by participants in the industry are indicative of the distributive shares of their technological control. Whatever that precisely means, I don't know.

A few specific examples were given in the Government's case, and here I am not going back over those. In many cases they showed particular cogent reasons for acquisition of a strictly business character.

Now, here what we have done is fill it out with examples of patents acquired, so that we have a documentation, I believe, of every patent acquired by DuPont. They are grouped, as you will see from the index, in terms of the person from whom acquired.

We take up first of all the three foreign associates, La Cellophane, Kalle, and B. C. L., and then American Solvent Recovery, the Dobeckmun and Humitube situations, and the miscellaneous ones, and then we deal with Sylvania. Some of these patents that were acquired were used, some of them were not used. And I am simply going to go through the pages and point up a bit the significance of each of the documents.

8053 675 and 676—it bears an A on 675—relate to patents which La Cellophane had issued in the name of Brandenberger pertaining to the use of cellophane as a wrapping paper for cigarettes. And in the second paragraph, 675–A, the patent service says that the company is still interested in this use of cellophane, but unfortunately so far he found nothing that is practically useful.

We took this invention from La Cellophane because here was a use in which we were interested and which might be of value.

Your Honor will immediately appreciate that no cigarettes ever were wrapped in cellophane, and just how one would measure the exclusionary effect of having acquired a patent covering that use, except as being minimal, I do not know.

676, a document in 1935 relating to another one of the French patents. This one relates to the sticking of sheets of cellulose by providing the film with a particular kind of surface treatment of sodium silicate. You will notice that there the patent service says, "We are not at the present time practicing the invention inasmuch as it has been superceded by more improved methods of sizing the film to prevent sticking."

But there was a use of value and, of course, the Government's evidence shows that the patent was used.

8054 677 is another of these La Cellophane patents, and there I think you see the reasons in the last two paragraphs of this document from the cellophane research people. They state that the work that the French have been doing on these rods is worthwhile, and that they have been working with the French in developing ways and means of having a knobby surface to the rods, and since this is of utility and it will fit into the process, they should acquire the patents. They acquired the patents, and I think stationary rods were replaced, the rolls in the coating machine at the bottom, and the patents were used. The absence in these documents of a discussion of exclusionary purpose and blocking and fencing, I think is most significant on this whole issue of intent.

We come now to a group on Kalle. The first one is 678, a patent relating to a method of making viscose, which we find very interesting, and which we show we are interested in experimenting further with, and that we have some doubts as to whether it will work or not. But it is in a field where we are exploring and, therefore, we take the patent.

679 and 680 are two documents concerned with apparatus for coating cellophane. We find that we have more than a passing interest in this invention, and we are going to get additional information from the Germans concerning its design; that our

8055 people do not believe that the German apparatus is superior, but it may be simple. And, therefore, we want to get the rights and work with it to see what we can do with it.

Then 681 and 682 relate to a couple of patents concerned with the use of cellophane as a tracing paper. Here again, somewhat like cigarette paper, a use which might develop. And the documents show in 681 on the first page, in particular, that we have

been interested in this as a possibility, and that no use has developed, but it may, and therefore we better have the patent.

In 683 there is a document there pertaining to a method of using titanium whiting pigment to make an opaque cellophane. And we point out that we are working in that area.

684, we say we are generally interested in that subject, and we think we better have the patent rights so that we can handle it.

685 and 688 related to laminations, various documents that the German patents have.

In 686 we say that they have quite good claims considering the state of the art, and is of interest generally in the laminating art. And we show that we are experimenting with that.

In 687 we talk about the method of adjusting the hopper,
8056 as discussed by the patent, and therefore, we think we ought to pay the fee and let the patent issue.

In 688 we are concerned with an alternate anchoring agent, and we say that this relates to a technique that may be of interest, and its success depends on what can be done. And so we take it. In each instance there is an example of the patent and some discussion as to how it fits in with the Du Pont current research program or current manufacturing development program, and the reasons for acquiring the patent are related to those reasons and not to the reasons which the Government from its statistical count has assumed.

In 689 we come to the first of the B. C. L. group, and they run through from 689, I think, to 692. One is a heat-sealing patent in which we say at 689 that we think is a desirable objective to improve heat-sealing, and we are working on that.

690 and 691 relate to laminations again. We say, for example, there is always a possibility of these patents proving important because of our current interest in the field.

In 692 is a use patent. You will see on the A there that this invention is only indirectly of interest in the cellophane business. It is not practical in operations, and it is not likely that it ever
will be. It may be of interest to the cellophane converters,
8057 and it is suggested that the rights to operate under the patent be offered generally to the trade. That is a laminating patent which we wish to hand out to the whole converting trade to see if it will encourage the use of cellophane.

Then in 693, your Honor, we have put in, and the accompanying letter, 694, the non-exclusive contract for approximately 30 patents relating to solvent recovery.

I do not know if your Honor recalls when we were at the plant we went outside at one step in the tour and looked at the apparatus for solvent recovery, which was there near the tower. Here

you will see that this license, and this includes a lot of patents that weren't used in the Government's statistical count, because we only used some of them, that the patents are licensed in a group by the American Solvent Recovery Corporation on a non-exclusive basis and we buy the group on the basis set forth in the contract; and some of those become vital to our operations and are used, and some are not. Certainly nobody is excluded from the use of these patents, which were licensed elsewhere, your Honor, as well as here.

695 and 696 are two instances relating to Dobeckmun and Humitube. Dx–695 shows that the exclusive license to Dobeckmun and Humitube for cigar tubes contains the exception I talked about on the case earlier for cigar packagers who made tubes for their own use.

8058 696 establishes the cancellation of the label with the cancellation of the agreement. There was talk about that label on the Government's case.

In 697 we have put in a technical evaluation of the Groves patent that was acquired from Titanine. This was a subject of some discussion in the Government's case. We show that there are some difficulties with the operations of the patent. You will see the conclusion in the report on 1443.

Then here is an instance of a non-exclusive acquisition from a fellow named John Smith of a patent for $300, which is an attachment for drier rolls, special joints for rotating the rolls. And you will see that we are positively interested in that as something which may be useful in our operations, and not being acquired for any other reasons.

699 is a non-exclusive license from S. D. Warren Company for using experimentally certain air brushes they have developed in connection with coating operations, again no exclusionary purpose or comment.

700 is a patent from the Alien Property Custodian, a non-exclusive license, which covers that situation. It covers chemicals for coagulating bath. I think it is the only license we have from the APC.

8059 701 and 702 cover the acquisition of the patents from Courtalds, about which there was some discussion on the Government's case; that will tie into that other proof. These relate to a coloring process for bands, which was not used.

Then we have the license for a ribbon patent, a use patent in 703 from Leo Silverman and Company. That is non-exclusive.

Then there are three from Schraner Cutting Machine. That was used jointly by a Du Pont employee—or developed jointly by a Du Pont employee and by a Schraner employee, and there is one

patent that comes in 704, 705 and 706, which shows that Du Pont was actually working with the machinery manufacturer in the development of the patent, and that we naturally took a license under it.

It will go down as a horrible case of non-use, in the Government's statistics.

In Columbia Naval stores, covered in 707 and 708, there is a component for a coating composition which was produced by Du Pont for its own use under this license. There is an example where we acquired what we thought was a necessary and desirable patent, and used it in our operation, even to the extent of setting up our own plant facilities for its manufacture when we couldn't get it from the outside.

709 has to do with a customer use patent which we didn't
8060 use, that we got from National Adhesives Corporation in 1937, and there we say the executive committee is interested in adhesives to facilitate the sale and use of cellophane film. "With this end in view, and to avoid litigation, we offered to exchange licenses with National under these patents, and the enclosed form of agreement is satisfactory to them."

710 is the case of a patent that was used, which completes this group of acquisitions, where we got an apparatus patent from the Cameron Machine Company. It is a patent relating to the aligning of film in the slitting operation.

Now, this whole group, your Honor, which I offered in evidence, shows that each of these was a separate story. Each of these came along, was looked at, and a decision was made as to whether to acquire them or not. They do not fall into any pattern; they do not fall into any pattern of intent or aggregation that the Government is talking about. Some were used, and some weren't used. In cases where they weren't used, sometimes they were customer patents, sometimes they came with a bunch of other patents. Sometimes we thought they would be useful, and it turned out there were new developments that superceded them.

But I have offered them for the very purpose of showing to your Honor that you can't by some statistical count say that this
8061 added up to so many, and then say, uh huh, conclusion," and come to the conclusion that this was monopolistic conduct.

Then when we underlie it with the account of the research and the developmental work that was going on in this company and measure the insignificance of these miscellaneous patents against the basic developments of the company, it is perfectly apparent that only by statistics can the Government hope to carry the day. You can not count patents and add them up to look what they were about, and what their significance is, and why they were obtained.

Now, we come to a section relating to Sylvania, 711 to 731, which goes all the way to the end of this volume. These documents relate to the operation of the basic Sylvania agreement, and to some extent, cover some of the miscellaneous other patent agreements that were made with Sylvania.

We are first concerned with this so-called patent pool. You will recall that the Government on its case made much of what it called a patent pool. I think the record already shows that there were only Du Pont patents relating to moistureproof cellophane in the license agreement at the time it was signed, and during the whole course of the agreement Sylvania granted licenses to Du Pont under only 9 patents.

We intend to show what those patents were, and we also
8062 intend to show here that the so-called pool continued to be, as it was at the outset, a one-way street.

I wish to offer this group, 711 to 731, at this time, your Honor.

("Defendant's Exhibit No. 711 to 731, inclusive, were received in evidence.)

Mr. Gesell. The first document is a document which we were very fortunate to obtain, because it was in the Government's case. It is a letter from Sylvania to the Attorney-General, and we learned from that information for the first time, which we had ourselves never had, and I wish to spend some time on that exhibit. I am particularly interested, your Honor, in the analysis of the various schedules that appear at the back, beginning "Class I, Non-Heat Sealing Moistureproof Cellophane," at Page 1467.

Sylvania has there listed by types the patents which it used that it got under this agreement, or which were of its own development, in response to this questionnaire from the Government.

Now, under Type A, which is a single coating non-heat sealing moistureproof cellophane, as appears by reference back, the list 7 patents. The first four are Du Pont basic patents. Then they list a Du Pont patent No. 2,186,262, which is a Mitchell-Du Pont plasticizer patent. That was a patent which wasn't used by Du Pont, which was licensed under the agreement to Syl-
8063 vania and used by them as a plasticizer in making this type.

Then they show two of their own patents of that type, the last two, both of which were licensed to Du Pont under the agreement but not used by Du Pont. But you will see that they were used here by Sylvania.

Then turning to anchored coating, Type B, there is quite a long list of patents there. Again, your Honor, they use the first four basic patents to make that type, Du Pont's basic patents.

The next one is a Charch patent, a Du Pont patent.

The next one is a Charch patent covering glyptal resin.

The next one is a Charch patent.

You understand Dr. Charch was with Du Pont. They were Du Pont's patents.

The next one is a patent relating to anchoring used for a time by Du Pont and used by Sylvania.

The next one is a Du Pont patent.

The next one is a Du Pont patent.

The next one is a Du Pont patent.

And at the end are two Sylvania patents.

So out of this whole group of 13 patents, 11 of them are Du Pont's patents which Sylvania had to use in order to make its anchored coating, Type B.

8064 Type C, which is a waterproof single coat, there are four basic patents, and a Sylvania patent.

In Type D, you follow pretty well the same list of patents that are under Type B. You come out again with a great bulk of the patents. I think only two are Sylvania.

Type E, which is another single coat, non-sealing, all Du Pont patents, nothing else.

Type F, all Du Pont patents, the four basic patents again, and a Schneider-Du Pont patent, which, of course, was used by Du Pont.

Then we get into the heat sealing moistureproof cellophane, which your Honor, the evidence shows is the most important single type of cellophane in the moistureproof group, as far as Du Pont's picture is concerned.

You see under Type G the four basic patents, and then a Du Pont patent on heat sealing compositions, which was used by Du Pont, and a Sylvania patent.

In Type H, it is the same as G, the same patents, all Du Pont, except one, which was Sylvania.

Type I shows the basics, and then again follows down the same pattern as Type B above, mostly Du Pont origin. And that is true all the way through every one of these types. It is summarized on the last page, and you find there a list, and you will see the ones they used.

8065 We have analyzed those totals there that are shown against the information in the patent interrogatory, and it shows that Sylvania used 19 different patents in making these various types, 15 of them were Du Pont patents which they got under the agreement, and they used four patents of their own, none of which were basic, two moistureproof composition ones, one anchoring, and the other heat sealing, one of the nine that they licensed to us.

So we see from this the actual operation of the agreement, Sylvania utilizing and in some cases, where the basic patents are involved, surely having to depend upon the Du Pont patents in order to do business, with a substantial number being used by them against only four minor ones of its own.

8066 Now, your Honor, I came to a very significant exhibit in the case. If your Honor will take up Exhibit 712, I would like to discuss this exhibit at some length. You will recall that there was a great deal of discussion about what the Government calls from the phrase they picked up in our documents occasionally a penalty royalty provision of the Sylvania agreement, and I think at one time we drew on the blackboard our relative and respective understandings as to the operation of that formula. We have contended and continue to contend that Sylvania never made up to the amount of cellophane which it was permitted to make under the agreement before it was required to pay the extra royalty. Your Honor will recall that of course the extra royalty related only to the sales in excess of the specified amount and not to the entire amount, and of course related only to United States business and only to moistureproof business, export business and, plain cellophane business not being involved at all.

What we have tried to do here is to compute on the basis of the material in the case what Sylvania's percentage was as allowed under the agreement, what its actual manufacture was, and the additional pounds it could have sold had it gone out and gotten the business; and then we have computed that as a percentage of its total sales. If you will follow me across one of these I think you will see the formula.

8067 The first column shows the time, and so forth. This is the year 1933. Then the column "Sylvania Sales Subject to License Agreement" is the domestic moistureproof sales, and then we have Du Pont's corresponding sales, and then by a process of mere addition we have accumulated those to show that the total sales were in excess there of 18 million in that year. Then Sylvania has a percentage of the total. In other words, what its 2,287,000 is of the total. That is pure mathematics. That is 12.7 per cent. They were allowed 20 per cent. under the contract GX-2487; and then we have computed what the additional pounds were that it could have made before it reached that 20 per cent. and sold to the trade if it was able to get the business. We have computed it on the assumption that this business would be obtained from other than Du Pont accounts.

Then we have computed what the total comes to. They could have sold in that year 1,646,000 pounds more than they did before they reached the 20 per cent. point or 72 per cent. more of their sales.

And so if you will follow that down we have done the same thing each year, and if you follow that down you come on the left-hand column down to the point of the end of 1944, and then just to carry this out, your Honor recalls that at the end of 1944 the agreement was cancelled insofar as any provisions with respect to royalty are concerned, but we have assumed that it remained in effect up to the life of these basic patents and we have computed how it would have worked out, and you
8068 will see that in the period of the agreement, that is, up to January 1, 1945, Sylvania could have made 44,936,000 more pounds than it actually did without coming into the penalty provision. That is summarized further underneath the right-hand column or 41.2 per cent. of its total sales. Then if you carry it out for the whole period through 1948 you will see that the additional total poundage is 98,654,000. So the first figure was the total simply for the period 1945 to 1948—I misspoke as to that—and the second one is 1933 to 1948, the whole period, 35 per cent. or 98 million, and down at the bottom of the right-hand column you see what it would have been if you took just the period that the penalty royalty provision was in effect, a total of 53,718,658 pounds more than they did or 31.4 per cent. of their allowed percentage.

This schedule does not go to the question of the legality of the contract as such, but this does go as to what the effect was of the provision with respect to the royalty. We of course say that the contract as such was proper and that there was no reason why we could not assess this extra royalty after a certain amount of production; but be that as it may, you see here what that actually meant in operation. Throughout this period there was available for Sylvania substantial additional business that they could have produced and sold without running afoul of this penalty royalty provision, and it totals up to the grand total, if you assume
8069 the contract had carried all the way through, to over 98 million pounds. If you compute it on the other basis, assuming they took all the business from Du Pont, you will also find the same situation prevailing still, substantial poundage that they themselves could have sold.

The COURT. Directing your attention to the seventh column entitled "Additional Pounds Sylvania Could have Sold Without Paying 20¢ Additional Royalty" what is the basic data upon which those figures rest? How did you know what Sylvania's potential was in any particular year?

Mr. GESELL. We don't know their potential. We are simply measuring here what they could have sold without having to pay the additional royalty, not whether or not they had the capacity to do it. The figures come, as you see, from our figures as to what

their production was, which is in the case, and then we say they could have done that much, but we don't measure whether or not, your Honor, they had the capacity to do it.

The COURT. I see.

Mr. GESELL. I think the plain fact of the matter is that certainly in these early years they did not put in as much capacity as they could have to produce the maximum amount they were allowed to produce under the contract before paying a royalty.

Then the next exhibits which came along here are a group of documents which relate to a different subject matter.

8070 Defendant's Exhibit 713 is another document that shows Sylvania's improved position after the moistureproof license agreement had been in operation for a year or two. Their growth, you will notice from that table at the bottom, was greater percentage-wise than Du Pont's, and it was doing well under the license agreement. There is some indication that it was engaging in some fairly unusual activities like horsehair. I don't know what effect that had on its energies as to cellophane, but you will see that under the license agreement they have done well, and your Honor will recall that there are other exhibits in the case which show that the licensing of the basic patents improved their competitive position and the quality of their goods.

Now, 714 we put in here simply to show an example of the care with which Du Pont patent people considered whether or not the basic moistureproof agreement applied or did not apply in a particular instance. The Government has charged that this was a broad general understanding and patents were just dumped in whenever it suited the convenience of the party. There is no support for that in the documents. The agreement did not provide for any general exchange of technology or know-how, and it did not apply to plain cellophane. Defendant's Exhibit 714 shows the careful attention by Du Pont to a Sylvania patent, with the decision that its utility at the time was great enough to justify requesting a license; but there is no effort to throw

8071 that in where it does not belong under the agreement, and they appraise the patent before they request the license.

8103 Mr. GESELL. This section, your Honor, covers the entire volume. It is Roman IX, "Du Pont Relations with Foreign Cellophane Producers." Mr. Minicus and I have agreed the discussion will be undertaken in two segments. I will go down through IX-A, completing with Exhibit 761, and he will make his comments on that particular phase, and then we will pick it up at 761 and take through the rest of the volume.

Our contentions as to this aspect of the case, your Honor, are set forth in our trial brief under Roman VII at page 23 and running

on through until the discussion of caps and bands starts at page 28. Our evidence here will touch on a number of these points. Many of them are already well established by the Government evidence.

The first section, "Relations with La Cellophane" is concerned primarily with developing two or three essential facts. The first of these, of course, is the question of intent. What was the intent of Du Pont when it organized the Du Pont Cellophane Company with the French? What was the intent underlying the agreements?

The next thing we want to show is how that company was set up and functioned, and most important in the section we wish to establish through documentary proof, which will be supplemented by substantial oral evidence, the nature, character, quality, and importance of the technical information which was received
8104 from the French pursuant to the understanding reached at that time.

We start off, and I will offer this group as a group, with 732 to 761, inclusive.

(Defendant's Exhibits 732 to 761 were received in evidence.)

Mr. GESELL. We start at 732 with just what seems to us an essential document in the case, the Certificate of Incorporation of Du Pont Cellophane Company. This shows you what the company was, what its basic corporate set-up was. We call particular attention, your Honor, to page 1537 which contains the provisions specifying the number of directors the company shall have, and under Paragraph 8 (b) on page 1537 setting up a provision that 75 per cent. of the common stock is required to vote on important problems relating to the indebtedness of the company, reduction of the stock, the leasing and disposing of assets, and matters of that kind. Your Honor will recall that Du Pont had 52 per cent. of the stock. Therefore the French vote was required in respect of any matters covered under (b).

Of the eleven directors seven were Du Pont and four were La Cellophane.

In 732 we show the amendment which was made in the Certificate of Incorporation in 1926. The primary amendment here was to reduce the number of directors from eleven to nine, and it was at this time that Mr. Lammot du Pont and Mr. May went off the Board of the Cellophane Company.

8105 Then we come over to the by-laws in the following exhibit, and the significance of the provisions with respect to number of directors becomes a bit more clear. I call particular attention to Section 2 of Article 5 on page 1562 which shows that a vote of seven directors was necessary in respect of any commit-

ment in excess of $10,000. From 1926 to 1936 the vote of seven directors was required, and Du Pont had five. That is the corporate set-up.

Then we come to 734 which Mr. Minicus says is the outstanding example of self-serving evidence in this case. It is a schedule of who the directors were and their period of service. It was prepared for purposes of this case. We thought it would be helpful.

The COURT. I am able to identify every one on that list except the last name. Will you refresh my recollection?

Mr. GESELL. Mr. Paskus?

The COURT. Yes.

Mr. GESELL. He was an American who was an attorney for La Cellophane interests in this country.

The COURT. I see.

Mr. GESELL. Mr. Ben Paskus.

You will see their periods of service. You will see Mr. Lammot du Pont and Mr. May dropped out as of 1926, a matter I referred to before, and you can compute as of any date from this how
8106 many directors each of the two interests had. This carries it right through to 1936.

Mr. MINICUS. I would like to find out—I think there has been a misstatement here. Mr. Gesell said the consent of seven directors was necessary and that Du Pont had five. There are listed here for Du Pont in the second Cellophane Corporation seven Du Pont directors.

Mr. GESELL. No. You will see that some of them resigned in midstream and were substituted for by others.

Mr. MINICUS. That is not the way it reads here, Mr. Gesell, I don't believe; is it? They all run down to 1936.

Mr. GESELL. Yes. Take Mr. W. C. Spruance. You will see he was on April 1, 1929, to October 28, 1929; and take Mr. Pickard, who was on April 1, 1929, to October 28, 1929. They didn't run down.

Mr. MINICUS. That is true. I apologize, sir. I let my eye run down the page.

The COURT. All right.

8107 Mr. GESELL. Now, the next document, 735, is the computation of the value which the company assigned to the contribution of trademarks and patents and processes from the French on the assumption—and that is the assumption underlying the exhibit—that the contribution of each of the two interests was the same in proportion to the amount of stock they obtained.

You will see that key figure on Page 2 at 1568 of $474,364.80. That is after taking into account the re-valuation which took

place of $100,000 due to the dispute that arose between the parties as to the value of the patents which Du Pont claimed had been represented as being of more value than it turned out to be.

The COURT. Isn't DX-735 the exhibit Mr. Haley identified?

Mr. GESELL. Yes.

Then we come, your Honor, to Exhibit 736, the report of Mr. Spruance to the executive committee of the company back in 1922.

The COURT. Before we pass DX-735, did you have an objection to that?

Mr. FITZPATRICK. Yes, your Honor, we have a standing objection. I was saving it until Mr. Gesell reached the end here.

The COURT. Very well, sir. Proceed.

8108 Mr. GESELL. 736 is Mr. Spruance's report to the Executive Committee, and you will see preceding it a letter from Rosé & Paskus on the Rose & Paskus stationery signed by Charles Gillet to the company.

Now, these two companies, your Honor, one shows that they were seeking a proposal for definite consideration, and here you see in 737 the proposal of the French on December 5, 1922.

There are certain factors about this, your Honor, which I want to emphasize. Here is what the French put up to us. First of all, they were putting up a proposal, as you will see in the second paragraph, for the manufacture and sale of cellophane in the United States. And they still have under consideration our request to broaden that to include Canada. As you will see in the third paragraph from the bottom, also, they are thinking of a joint manufacturing undertaking in which shares would be issued to both parties.

The final contract that came along in GX-1,001 in June 1923 follows the pattern of this proposal which the French made at that time.

Then we have documents which give the background of the technical agreement in 738, and we show the course of the negotiations which took place with respect to the technical agreement.

You will see the French batting us down in 741 when we
8109 sought to broaden the area in which we would have rights under their inventions.

I call particular attention to the third paragraph of Mr. Gillet's letter at Page 1578 of Exhibit 714-A.

So thus far, we have documents which show the corporate setup, the joint participation in the company's activities, contributions by the two enterprises, and the stock they got. We show that the French, who, of course, were in the driver's seat in this deal, were the ones who were imposing the terms.

Now, the next document, your Honor, is, in our judgment, one of the most significant documents in the case. You will see that we have just printed the frontispiece of it here, and I want to hand the document up to the Court. The Government has a copy.

We are starting with this exhibit, your Honor, to show by a group of illustrative documents, that the French contributed secret information, secret inventions, the whole framework of this process, and that it was the basis upon which Du Pont entered the manufacture.

Now, the Government takes the position in their effort to undermine these basic agreements, that there wasn't any secret information, and they have urged very strongly that point of view upon the Court, that these documents were just some kind
8110 of a sham set up to disclose a deep underlying plot to divide world markets, and that they had no substance.

The COURT. Is the document which you have just handed to me actually to go into evidence?

Mr. GESELL. Yes, your Honor, as 742. And I have indicated that by the frontispiece, which is in this series of the formal exhibits we are going through. It is 160 pages long, and we didn't feel justified in the expense of reproduction.

Now, this is the so-called Smith-Cullen or Cullen report.

The COURT. Who was Smith and who was Cullen?

Mr. GESELL. Mr. Smith was a chemist in the employ of the Du Pont Company. Mr. Cullen was an engineer in the employ of the Du Pont Company. Mr. Smith at the present time is president of Visking. Mr. Cullen will be a witness here at the trial. He is retired from Du Pont and he will be called as a witness.

Now, this report, your Honor, contains the information that was obtained by these two gentlemen when they made a visit to the French works at Bezons, France. You will notice that it bears the date August 27th to September 29, 1923. For the Court's convenience I have made a table of contents, which I believe you will see on the flap sheet that comes up, as a means
8111 of showing the scope of the report.

That table of contents is mine. It is not part of the report, but it simply copies the headings of the report. And you will see that this document starts with viscose preparation, goes down through all the various stages of the chemical building, the steeping, the shredding, the barrets, the mixers, the ripening, and so forth. It goes down through the entire casting operation, covering not only the construction of the building, operating problems in connection with casting, but the manufacture of the machine, the setup of the tanks, the rolls, the driers, the pipe lines, air pressures, a whole detailed analysis, your Honor, of operations

and productions in the casting stage, film covering, color production, statistics, viscose production, shrinkage, waste, clarity, and all kinds of cost and operating problems.

Then there is a very significant section relating to the index and viscosity which, of course, is the key data controlling this operation.

Then there is an analysis of the chemistry of all the different coagulating baths, how they are prepared, the casting machine baths, a detailed study of the chemical controls of the process, and then a whole bunch of special items at the end having to do with the manufacture of the product, its shipping, its slitting, and its handling.

8112 This report shows that every detail of La Cellophane's operations from beginning to end was turned over to these gentlemen. You will see on the first page that this is a follow-up of a visit that has already been made by Mr. White and Mr. Hope, who made an extensive study and worked with Mr. Brandenberger, and this is the detailed study that came later. This is before the plant, your Honor, was in operation.

Now, supplementing it, if your Honor please, you will see by turning to 743, for a moment, a list that we have prepared showing the blueprints that were turned over in connection with this disclosure of the information and techniques contained in the report, detailed blueprints covering every phase of the design and operations of the casting machine, of the drying apparatus, and so forth.

Now, I do not think there is any way that I can summarize this document and get to your Honor its extreme significance from the point of view of our contentions. Obviously, you will see that there is information here in the report which isn't secret information. The question of whether or not the building was made of brick or whether it was made of some other material doesn't come under that heading. But you will also see that there

8113 are the most detailed disclosures of design, operating techniques, chemistry, indexes of manufacture, which are of great significance, and some of those matters will be discussed by the witness on the stand.

The detail of the blueprints is equally remarkable. On the hopper you will see that there were 11 different blueprints alone, on the casting machine 43 different blueprints.

Now, this information, your Honor, came from the French, and it was the information that Du Pont used which enabled it to skip all beginning operations in terms of semi-works and construct and operate immediate the first cellophane plant in the United States. And for the Government to say that this agreement was a great camouflage and that there wasn't any substance to it, that

there wasn't any secret information, in the face of this kind of a report, is for it to make a contention which has no evidentiary support whatsoever.

They would like it to be that way because, of course, if there wasn't substance to the agreement, if there weren't real significant disclosures here, why, then, their attack on the legality of the agreements might have some success. But given the licensing of this information, it can't have any.

Now, I want to go along with a few documents to round out the picture of what happened in these early days. You will see
8114 that during the period of construction of the plant, in the documents which follow here, that back and forth there were communications with Mr. Cullen and with Mr. Brandenberger asking to have straightened out various questions which arose in the course of the construction of the plant. A couple of these documents, your Honor, I am sorry to say, are not legible, 748 and 749. I would like to hand up legible copies of those.

They are the two hand-written letters that appear at 1597 and 1598.

In 744 you will see a letter to Spruance from Brandenberger in which he gives a detailed report of the mechanical services and design, discussing various phases of the operation, saying that it is necessary for them to lower certain tanks, to decrease the lengths of the shafts. He recommends specific procedures for the washing tanks. He tells them how to control the film machine in terms of its speed in relation to the velocity of the tank. In the glycerin tank he tells them again how they must adjust the relationship between the apparatus and the bath.

Then in 745 you will notice that the actual machines, the actual casting machines, are being purchased and constructed in France.

Your Honor knows from the visit to the plant the key importance of the hopper, which is called here the pellicule machine
8115 in this whole casting and operating process, and here you will see that those weren't even made in this country, but they were made abroad under the supervision of the French engineers.

Then in 746 you see a letter from La Cellophane on the drying phases of the business; a letter to Mr. Hope of the Du Pont Engineering Department, and he says on 1593 that "The consensus of opinion here, it would certainly be to Du Pont's advantage to substitute for zinc covered rolls, as many lead and antimony covered ones as possible." And then he gives the instructions as to how to heat the drier, how to construct the rolls with respect to that. This is all based on their experience, your Honor.

In 747 you will see that the drawings for the machine and the design cover the various latest French experience, in 1954.

You will see from these letters, copies of which I handed you, that as specific problems arose, there was correspondence back and forth with Brandenberger as to how it should be handled.

You will see a letter here in 750 to Mr. Hope talking about the consensus of opinion as to how the compositions of the various metals in the bearings should be—the different component of metal that should be put in there, the relationship of that to cost, the problem of corrosion.

You will see a discussion in 751 of the orders put in for the hopper lifts at Bezons.

8116 And so you follow the thing through. In 1924, in 753, a wire goes out to Brandenberger, Du Pont is having trouble casting with certain kinds of rolls, and asks for a wire back as to what formula should be used and what temperature should be used, how they should make these molds, they can't make them; and another cable on the same subject in 753.

8117 Then La Cellophane comes back and they tell some of the information. They say Mr. Cullen has studied it and he has got more data on that so they can go to him.

Then you see a letter to Mr. Pierce on another detail of the construction. They are asking for the French experience relating to the jaws of the hopper which they characterize as one of the most difficult details of construction.

The COURT. As of this time Du Pont was in operation in this country?

Mr. GESELL. No. The plant, your Honor, was being built during this period. The plant was being built. They were problems that arose after the visit, and you will see as we go along in 756, which we have just about reached, that Brandenberger arrives on March 31, 1924, and the evidence will show here that he came over with some technicians. He had three operators with him and he came over at that time and was present at the time of the start of the operations of the plant which had been under construction up to that time.

There is one detail before we get to that in 755. May I just call attention to the problem of specification there of the hopper lips in 755, and you will notice the careful way in which slight changes in the composition of those lips is brought to the attention of Du Pont, a good example of secret technical information at that important phase of the process.

There is discussion of the operating problems on the

8118 lips, too.

Then Brandenberger arrives on the 31st of March 1924, and he makes some recommendations which you will see discussed there. This is at the time the plant is about to start.

Then over in 757 there is a report on April 2, 1924, which I think fixes the date of start-up very clearly, a report to Mr. Wardenburg which says, "As you probably know, we have been making cellophane for the past two days." So that fixes the date about the beginning of April 1924, Brandenberger having gotten over here for the start of it.

The COURT. Go back to Defendant's Exhibit 756 and look at the last paragraph.

Mr. GESELL. You mean on 1612?

The COURT. That is right.

Mr. GESELL. Yes.

The COURT. Now I want to ask you about that. Had Du Pont salesmen prior to this time gone out into the field and taken orders?

Mr. GESELL. No. I believe these are orders for equipment. These are orders for machine equipment, your Honor.

The COURT. I see.

Mr. GESELL. You see, Brandenberger recommended a new design for air ducts and fans in the drier, and I take that to mean that the production manager is talking about cancelling the orders at that time and putting in the new type of

8119 equipment.

Then you see in 757 that they have been going for a couple of days. It says, "The No. 1 casting machine is running very nicely from a mechanical point of view and producing excellent results. We, of course, have been obliged to make some changes here and there in speeds and so forth to accomplish this."

They talk also about the No. 2 casting machine and say, "Our French friends who are assisting in the operation of the No. 1 machine expect to return home before the end of April," and they want to get the second machine—this was a two-machine plant, your Honor—started; and they say, "There is no question but that it will be brought up to capacity much quicker with their help than if we are on our own resources."

Now, those are merely illustrative documents underlying, your Honor, the basic reports such as this Smith-Cullen report which show the close working contact between the French technicians and Du Pont, working together to construct and get this plant going in accordance with the best French experience. As I say, Mr. Cullen will be called and he will fill in the story, but I think the main outlines from this are clear.

Now, in a group of exhibits that follow we turn to a totally different subject. This is the termination question at 758 to 761. We have merely here put in a few documents which show that with the cancellation of the agreements in 1941 as a
8120 result of the war conditions that that cancellation was immediately implemented by instructions to the technical people in 759 from Mr. Yerkes by telling them not to keep other technical reports and that the technical exchange had been terminated and that if it ever be resumed it would not be retroactive or cover any information in the meantime.

760 merely fills in the Government evidence, GX-1381. The French ordered some hopper parts from us after the war, and this fills in the story about that. We say they have to place their orders in the American market, in turn saying we can't give Comptoir certain information it wants in 1947.

Now, there is an issue in the case which these documents relate to only in a very limited way, and that is the question of the bona fides of the termination. The Government position is that it was not a bona fide cancellation, that all the foreign understandings persisted, and we have in later sections which I am going to discuss in this volume, but which do not come before this breaking point, further evidence on that aspect.

The COURT. As to the motive for the termination?

Mr. GESELL. No, not as to the motive; as to whether it was a bona fide termination. The circumstances of the termination are clear. The French wrote and indicated they had been invaded by the Germans and could not meet their contractual commit-
8121 ments, and we wrote back and told them that is the end of it.

We later cancelled the British agreement, which was not involved in the war, because theirs was a friendly nation; but at that time the agreements, of course, with the Germans and the French went down the drain. But the Government says that was all not in good faith, and we have later documents showing not only the implementation of the cancellation as here, but our actual conduct in the markets which was wholly inconsistent with the claim of any continuation of the agreements.

Mr. FITZPATRICK. First of all, your Honor, the Government respectfully requests a ruling on its objections concerning Defendant's Exhibits 734 and 735. If I may for a minute refresh just what those objections were:

Basically, in 734 we have a list of the directors which, as Mr. Haley testified, was made for purposes of this case. The Government has not been permitted to examine the original source material, and Mr. Haley admitted that he had not examined it; he had accepted a certified statement from Mr. Hess, Secretary of the company.

Mr. GESELL. You have seen that statement. You have seen the certified statement.

Mr. FITZPATRICK. Yes, we have, that is correct.

The COURT. I am going to rule on that right now. I am going to overrule the objection. The published financial journals for the years in question will readily disclose if this is inaccu-
8122 rate, and you will that, I presume, in connection with the financial statements issued each year. So that unless you can show some error in this list my ruling is that your objection is overruled.

Mr. MINICUS. I don't believe that is one of our troubles. I don't believe there were any published financial statements for this thing. It was so closely held there did not have to be any published statements. If we had those available we would have no difficulty here at all. This is for the Du Pont Cellophane Company, which was owned one part by the French and the other part by Du Pont, and we have never been able to find any published statements at all on it.

The COURT. Well, does your question go to authenticity or do you think there is really error here or a hiding of some individuals who were acting as directors and were not directors?

Mr. MINICUS. No, that is not the point. You will see here, your Honor, at the bottom of both series applicable to either corporation a listing of four or five names in either case who are stated to be representatives of La Cellophane. Now, particularly with reference to Du Pont Cellophane Company No. 2 we think that to permit this to go into evidence we should see something as of that period that shows that they were sitting on the Board as representatives of La Cellophane who the evidence already shows owned no stock in this company at that time.

8123 Mr. GESELL. Well, the Government's own evidence shows that. There are scores of documents showing that each of these people were connected with La Cellophane in the Government's case at this time—Blum, Gillet, and Paskus. There is no question about that.

Mr. MINICUS. We do have documents showing Blum acting as liaison between the Du Pont Company and the French, but we have no indication that they were acting as representatives of either side. As far as Mr. Paskus is concerned, we have no indication that he was a representative of La Cellophane.

Mr. GESELL. Of course he does not say that he was representative of anything; he says what their affiliations were.

Mr. MINICUS. That is a broad statement. We have no idea what that means. We don't believe that Blum or Paskus were ever officers or directors of the La Cellophane Company. We

have simply asked to see the original records of the Board of Directors' meetings and so on or something that dates back to that period that shows that these people were actually affiliated with La Cellophane, and they have failed to produce anything of that nature. We think it is extremely important inasmuch as La Cellophane owned no stock in this second Du Pont Company at any time.

The COURT. Mr. Gesell, I am going to require you to pick
8124 out a typical page of the minutes of the Board of Directors wherein these four gentlemen are either named as present or absent.

Mr. GESELL. Very well, your Honor.

The COURT. And show that to Mr. Minicus, and after that I will then rule on your objection.

Mr. FITZPATRICK. Thank you.

The COURT. All I have had to say heretofore with respect to the objection being overruled I take back. Proceed.

Mr. FITZPATRICK. Now, your Honor, we come to Defendant's Exhibit 735, and we have basically two objections to this document; your Honor. One is on the basis of the answers that Mr. Haley gave to the questions, and that was that the way he computed this part of $474,000 was by assuming that the French gave pro-rata to the shares received in the new corporation equal value to what Du Pont gave.

Mr. GESELL. No, no, no. Let us have that clear. The assumption which we readily admit is that each share of common stock had the same value.

Mr. FITZPATRICK. All right.

Mr. GESELL. That is the assumption.

Mr. FITZPATRICK. And that is saying exactly the same thing in other terms, your Honor, because if the shares of stock had the same value then the property and cash put up by the French as proportionate to the shares they received equalled the amount of cash put up by Du Pont, because the basic con-
8125 tract says Du Pont did not put up anything else.

Now, that is exactly the point we have at issue here, your Honor. They are trying to assume just what we are attacking. It is the Government's position that the French did not put up real value and that part of the consideration was an illegal consideration; in other words, the division of world territories; and so for that reason the document is worthless.

8126 Now, there is a second objection, your Honor. This document this morning was offered as saying this, I believe—I am not sure of the exact language, but I am sure of one point—the defense said that this number, this value, this $474,-

364.80 represented the value which the party had assigned to the information, patents and trademarks.

Now, your Honor, that is absolutely incorrect by the express terms of the document, and I quote from that document. This is not a quotation:

The Arena Trading Corporation also contributed "All of its and La Cellophane's right, title and interest in any and to any trademarks, patents, patent rights, including all pending and future applications, processes, data, knowledge, information, etc."

Now, your Honor, the Defendant omitted mentioning that word "et cetera," and it happens to be quite important. There was another provision in this agreement which called for Du Pont being appointed the exclusive distributor for La Cellophane in this country for the period in which it took them to get their plant in construction. Now, that was a thing of very significant value. The exact value of it we do not know. It does not appear in the documents, but we have a very good estimate of it.

8127 Dr. Sparre back in the original technical report of the Development Committee, GX-392 at Page 5447 stated that this Bern & Wackenheim franchise for the approximately 10 months which it would take Du Pont to put into production, he estimated to be worth $200,000.

Now, that, your Honor, was an element of value which the French contributed, and it is not represented in this document presented here, and the Defendant did not characterize this document to include that element of value. That would knock $200,000 off this $474,000.

We just maintain that this is a completely mythical figure. I call your Honor's attention to the transcript, page 239 of the transcript, the third day of this trial when the defense had just blandly informed the Court that their secret process was worth $246,666. Now, where is that figure, your Honor? We do not see that anywhere. Where is this figure of $474,000?

Mr. Haley told us that this $474,000 was $50,000 one way or the other from another figure that he saw somewhere in the basic documents. He said he thought he saw it in the stock escrow agreement or something to do with the stock escrow agreement. Well, your Honor, it wasn't in any of those documents, and Mr. Haley didn't see it anywhere. They compute it, and it means nothing.

The COURT. What monetary formula did you use to
8128 evaluate the worth of the material found in DX-742 and 743?

Mr. FITZPATRICK. It is absolutely impossible to do it, your Honor.

The COURT. You may say it is impossible, but when you enter into a business deal you have to arrive at some figure.

Mr. FITZPATRICK. Absolutely correct, but they never considered it.

The COURT. They recite on this the processes, the data, knowledge and information.

Mr. FITZPATRICK. Et cetera.

The COURT. Et cetera. This falls, it seems to me, within processes, data, knowledge and information.

Mr. FITZPATRICK. Is not, your Honor—not to be too argumentative about this point—but is that not taken for granted that the Bern & Wackenheim franchise was worthless to Du Pont? Sparre said it was worth $200,000.

The COURT. You are taking both transactions as part of one deal.

Mr. FITZPATRICK. It was, absolutely. Page 8 of Government's Exhibit 1001, the basic agreement, set Du Pont up as the agent of La Cellophane, and there were many other elements of consideration that we do not know anything about, your Honor, one of them being division of world territory.

The COURT. You may have a point, Mr. Fitzpatrick. Let me think about it.

8129 Mr. GESELL. If "et cetera" is very important, it is in the exhibit. Against the $474,000, the "et cetera" is there.

The COURT. As I recall Mr. Haley's testimony, it wasn't too clear that he knew how that figure got in the paper.

Mr. GESELL. He testified, your Honor, that this figure is a pure mathematical computation on his part, on the assumption that the shares had equal value, and Mr. Fitzpatrick asked him had he ever seen a figure like this anywhere else, and he said he thought he had seen one in the area of $50,000 one way or the other in some other document. Whether he did or whether he did not see one has nothing to do with the mathematical computations on Exhibit 733 by which this figure is arrived at.

The COURT. As I understand it, DX-735, that is a writing made for the purposes of this case; is that right?

Mr. GESELL. That's right.

The COURT. It would seem, then, the best proof of this would be the contemporary documents. What was the value assigned at the time that the transaction occurred.

Mr. FITZPATRICK. Exactly, your Honor.

The COURT. It would seem to me, from my knowledge of issuing stock in connection with Delaware Corporations, there would be no question, that figure would be recorded in some docu-

8130 ment. The very issuance of the shares to the European interests, there would have to be a document in connection

with that which would show the consideration that it passed for, because under Delaware Corporation Law you can only issue stock with certain designated profit.

Proceed.

Mr. FITZPATRICK. Thank you, your Honor.

At the very outset here, if your Honor please, the Government wishes to make its overall position in relation to these issues clear for both the Court and the record. First of all, even if we assume for the purpose of argument that each and every one of the factual contentions made hereby the Defense today are perfectly correct, that is, assuming the existence of the joint venture and the secret process, it is nevertheless the Government's contention that the basic La Cellophane-Du Pont agreement, covered in GX-1001, as well as the technical agreement, GX-1002, and the Kalle and B. C. L. agreements were all illegal from their very inception because they were essentially contracts to divide world markets unreasonably in restraint of trade. Now, that is purely a question of law, and we do not intend to argue it now.

Secondly, we categorically deny the existence of the following basic factual inferences argued here today by the defense.

No. 1, we deny that Du Pont's sole intent in entering into contracts with the French was to engage in the manufacture
8131 of cellophane in the United States on a lawful and sound economic basis.

No. 2, we deny the existence of a true joint venture, at least after the year 1929.

No. 3, we deny the existence in 1923 of a secret process for the manufacture of plain cellophane.

Now, let us consider these three factual inferences separately. Let us look at the facts themselves, and from them we shall see whether or not they support the inferences.

First of all, what was Du Pont's intent in entering into these contracts with the French? Now, as we see it, the Defense says this: No one was manufacturing cellophane in the United States. La Cellophane had secret information which was necessary to the manufacture of cellophane, and so, in order to get this information, Du Pont had to agree to La Cellophane's terms, namely, division of territories and a joint venture.

Now, your Honor, we will agree that in 1923 no one was manufacturing cellophane in the United States.

The COURT. Or any other place?

Mr. FITZPATRICK. In France.

The COURT. Just France.

Mr. FITZPATRICK. In France.

8132 But now this necessary information that they are talking about here, your Honor, what about it? Remember the issue here is one of intent, Du Pont's intent.

Now, when a company first desires to enter into the manufacture of a product, obviously the most important problem it faces is how to get ahold of the necessary technology in order to make that product. Is there technology available, and if so, is it controlled by United States patents; if so, who owns these patents, and are they valid?

These are all questions that any potential manufacturer normally would seek answers to, and one of the best stockpiles of this type of information is found in the vast number of issued patents in the United States Patent Office.

It cannot be denied that it is an every-day common practice for a large corporation to survey the existing and expired patent situation before it makes a move toward any new manufacture. It is on record in this case that this was Du Pont's normal policy, even in the year 1923 and 1924. And indeed, it must be the practice, unless there is a very special reason for dispensing with it.

Let us look at the facts of this instant case, your Honor: The defense tells us that on December 5, 1922, a proposal was put to Du Pont by the French. Now, on the 5th day of January, 1923, the Defendant entered into an option agreement with La Cellophane, Government Exhibit 1458, by the terms of this agree-
8133 ment the French were to convey to DuPont all the information which they had concerning cellophane's manufacture and production. And if things looked good to Du Pont, they had four months to sign the contract.

Now, your Honor, we are interested in three specific things about this option:

One, it is dated January 5, 1923.

No. 2, Paragraph 6, 9, and 10, which set forth the proposed territorial division and the joint venture concept.

No. 3, and this paragraph I ask your Honor to particularly note, Paragraph 3 says that Du Pont is not bound to take up the option, but if it doesn't then Du Pont covenants to stay out of the cellophane business in the United States for a period of five years.

It was Du Pont's agreeing to that provision, your Honor, that in reality put the fat in the fire; because it was as of that date, January 5, 1923, that Du Pont was bound to accept the territorial and joint venture provisions of the French, or else it was precluded from entering the manufacture of cellophane altogether for a period of five years.

So when it comes to determining intent, it is that date to which we must look. That was Du Pont's intent on January 5, 1923?

As of that date, did Du Pont know that La Cellophane had
8134 control of the necessary technology of cellophane? Did they know whether or not there were any United States patents, the disclosure of which might have completely described the cellophane process?

They did not, because they had never investigated the patent literature, and on the date they signed the option agreement, for all they knew, there could be some solid American citizen holding a patent basic to the manufacture of cellophane and possessing all the technology necessary to go into the manufacture of cellophane.

Now, your Honor, we are not trying to say that there was such a person, but there might have been one. And if we only say that Du Pont didn't have the slightest idea on this date whether or not there was, and since the question is one of intent, that possibility is a very important fact.

I am told, your Honor, that we do know that the Wolff Company was in the manufacture of cellophane in 1924.

Now, other facts, your Honor, I refer to Government Exhibit 392 already in evidence. This was a report from Dr. Sparre, Director of the Du Pont Development Department, to the Executive Committee, dated April 14, 1923, and again, your Honor, please note that date. It was more than three months after Du Pont had signed the basic option agreement, the option agreement, the option agreement which had, in effect, bound itself to the French.

8135 Now, Dr. Sparre is talking about the patent situation on Page 26 of that, and he says, and I quote:

"The writer feels a keen regret in this connection, because in similar cases of investigation this Department invariably investigates as thoroughly as possible the patent situation prior to the execution of any contract or option agreement. However, in this case this department did not have an opportunity to make an investigation of the patent situation until the terms had been negotiated, and the option agreement executed because—" And I call this to your Honor's attention—"because the offer from the French interests was only submitted very shortly before the departure of the French representatives from America. Under the circumstances, reliance was placed upon the accuracy of the French claims due to the very satisfactory partnership with them in the DuPont Fibersilk Company."

And we have there, your Honor, Du Pont's admission that they had not investigated the patent situation before they signed the option agreement, and Dr. Sparre regrets this, and he says it was unusual and out of the ordinary, and that is exactly the Govern-

ment's contention. At the time the Defendant signed the option agreement, they had absolutely no idea whether or not cellophane technology was available to the public at large. They had made no investigations. For all they knew there could have been
8136 hundreds of expired patents and published treatises which fully explained it and were open to the public.

No, they took the naked and unsubstantiated claims of a French representative and signed away their right to enter the business for five years unless they accepted territorial division and a joint venture.

The COURT. Are you trying to persuade me that the Du Pont management was naive, business-wise?

Mr. FITZPATRICK. No, your Honor, I am not. I am trying to persuade you that there was a very special intent in entering into this agreement. This agreement was not of the ordinary run of the mill type. This agreement was a good deal. The French told Du Pont they had a good business prospect for them and they could make 30 per cent on their investment, and let us get into it and quickly, and divide world territories. We are going overseas in a month, and if you don't get in now, you won't get in.

They didn't have any idea where the technology lay. Dr. Sparre said that no investigation was made because the offer from the French interests was very shortly before the departure of the French representatives from this country.

Mr. GESELL. Well, go on.

Mr. FITZPATRICK. And because of the very satisfactory partnership with them in the Fibersilk Company.

8137 Mr. MINICUS. Does Mr. Gesell wish to interject the contract between the French and the Du Pont Company and Fibersilk on this, because if he does, I can show the same territorial divisions carried over. This was not a new idea.

Mr. FITZPATRICK. There is the motive, your Honor. The La Cellophane people came over here in 1922 and they told Du Pont how much money they could make in cellophane if the two of them got together and could split world markets, and they told Du Pont they had to decide in a hurry.

8138 Du Pont had a good deal with them in rayon, and they saw similar possibilities with cellophane, and they signed the option agreement in a hurry without having any idea where the technology lay; and there is the intent, your Honor, the intent to make a good profit by dividing world territories.

Now let us pass to the second factual inference which the defendant asks the Court to draw here. Was Du Pont Cellophane Company No. 2, which existed from 1929 to 1936, in reality a joint venture? Defendant's Exhibit 734 tells us that the French repre-

sentatives from the old Board of the Du Pont Cellophane Company, Inc. No. 1 stayed on as directors in No. 2 according to the terms of GX-1003, and from that and that alone the Court is asked to infer a joint venture.

Now, what were the basic facts? In 1929 the parent company Du Pont had acquired from the French their 48,000 shares of voting common stock in Cellophane Company No. 1. Subsequent to that stock acquisition Du Pont and La Cellophane signed an agreement, Government's Exhibit 1003, whereby briefly Du Pont agreed to set up the Cellophane Company No. 2 and La Cellophane agreed to continue in force in favor of No. 2 the provisions of Paragraphs 9, 11, and 12 of GX-1001, which were the licensing and territorial division provisions, as well as all the obligations set forth in the technical agreement GX-1002.

8139 Now, then, your Honor, we come to Paragraph 4 of GX-1003, and it is upon this article, I guess, that Du Pont rests its joint venture concept. I would like to read it to the Court:

"It is the intention hereof that Cellophane shall be represented on the Board of Directors of said corporation succeeding to the business and interests of said DuPont Cellophane Company by the same number of directors which now represent Cellophane on the Board of said DuPont Cellophane Company, and that such representation shall continue so long as the best interests of both parties hereto, and the best interests of said corporation shall be served thereby,"—so far so good—"it being understood always that the determination of any question relating to the policy of said corporation in this regard shall always rest with its stockholders."

Now, your Honor, this Cellophane Company No. 2 which was organized was a wholly owned subsidiary of the parent Du Pont Company. Du Pont had 100 per cent. of the stock, and the last phrase of the article just read tells us that the so-called French representatives were to stay on the Board only so long as the stockholders felt that it was to the best interests of the corporation. And who were the sole stockholders? Why, Du Pont, of course. I ask your Honor what kind of joint venture can that be when the representatives of one party are present on the Board completely at the whim of the other party? The answer is simple. It

8140 was not a joint venture. The French had absolutely no control, and the only reason they stayed on is obvious. Du Pont did not want to antagonize the French and thus jeopardize their neat little division of world markets.

Now, your Honor, we come to a third final factual inference which the defendant asks the Court to draw here, and your Honor, if I may, I would like to say that today, this morning, we have

witnessed one of the greatest reversal of fields in history. Since the third day of this case the defendant has told the Court once, twice, ten times that they had to go in with the French because the French had a secret process for making cellophane; and I ask your Honor to read the transcript for this morning and you will note that never once was the term "secret process" used, because there was no secret process. After hearing about secret process, secret process, secret process, how much it was worth, how hard it was to get to it, we come up with and get "practical technical information."

Mr. GESELL. Well, so there won't be any misunderstanding about that, I say that that exhibit contains secret process information. That is the reason I offered it. That is the greatest play on words that I have ever heard. Secret technical information, secret process, whatever you want to call it, it was a secret invention, a secret process which could be licensed with limiting terms.

Mr. MINICUS. I think we should be definite about that,
8141 your Honor. You can't say secret process, secret technical information, whatever you want to call it. If it is a secret process it is a secret process and it may or may not have legal results therefrom. But if it is technical information, know-how, then we know no restrictive results are possible from it.

The COURT. It seems to me Defendant's Exhibit 742 will have to be explained by some live witness as to the quality and texture of the information therein contained.

Mr. GESELL. Thank you, sir.

The COURT. I don't think Mr. Gesell by saying it is a secret process can make it so, and you by saying it is not a secret process can make it so too.

Mr. GESELL. That is why I advised that I was going to call a witness.

The COURT. All right.

Mr. FITZPATRICK. Just to make it clear at this point, your Honor, we can go a little further. If it was a secret process then it ought to appear as such, and I would like to analyze it for a few minutes. When the Government's proof conclusively established that the Du Pont patent coverage was approximately zero at the time of Du Pont's entry into this business, and consequently that the basic Du Pont-La Cellophane agreement was illegal as being a pure and simple conspiracy to divide world territories,
8142 the defense informed the Court that on the contrary the agreement was perfectly legal, the territorial provisions being valid ancillary restraints in a contract by which Du Pont acquired from the French a secret process for the manufacture of cellophane. As legal precedent for such a position, your Honor

will recall that the defendant cited the decision in Fowle versus Parke and Dr. Miles Medical Company. Now, it is not my intention to argue the law at this time, but I do want to call your Honor's attention to the fact that both of those cases involve true secret processes, whereas in the case at hand the basic contract, Government Exhibit 1001, did not contain a single solitary reference to a secret process, none of the related correspondence of the parties mentioned the secret process, and there was no secret process. But the defense has told us there was, and if they have said it once they said it a dozen times. So let us see:

Now, first of all, what is a process? Essentially it is a method of doing something or a certain series of steps of making something. In this case the process under consideration is the method of making cellophane, plain cellophane. Now, then, your Honor, if such a process is developed by somebody what avenues of protection do the laws offer him? It is clear that there are two. One, he may keep it secret, and if he does the law will enjoin its surreptitious disclosure by intruders; or, two, he may patent it provided it is patentable, and if he patents it he discloses its
8143 principles to the world, in return for which he is granted a limited monopoly. It is equally clear that having chosen the second course, namely, a patent, he may never again be heard to argue the first. He can't say, once it was a patent, when the patent fails then say it was a trade secret.

Now, let us start with the beginning and look at the facts. If there was a secret process involved here I think the French who drew the option agreement should have known about it. Let us take a look at that option agreement and see what it says about that process.

Reading from the first page of GX-1458:

"Whereas the party of the second part represents that it and its associates are connected and identified with the business of manufacturing 'cellophane', a viscose product, and that it and/or its associates are operating a plant or plants in the Republic of France, and are engaged in the manufacture of cellophane upon a commercial scale"—and this is the phrase I want your Honor to note—"under a process which is protected by patents in the United States of America"—there it is in black and white way back in January 1923 in an agreement signed by both parties, and Paragraph 7 of the basic agreement 1001, Government Exhibit 1001, incorporates that very same phrase, "a process which is protected by patents in the United States of America."

The French said their process was patented, and Du
8144 Pont signed this option agreement thinking just that. If the parties way back in 1923 agreed that this process was patented, one of them cannot be allowed to come into court in

1951 and argue that it was secret. It was not secret. This process, the process itself, was fully disclosed in United States patents, and as such was dedicated to the public; and just because the patents turned out to be much narrower in scope than the French had claimed and Du Pont wanted, and hence for practical purposes they were worthless, that had no effect upon the disclosure of the process. It was dedicated to the public and it was open to the world.

Now, your Honor may ask about this Defendant's Exhibit 742. What about this 160 pages of information? Wasn't that a secret process? The answer is a clear and unequivocal no.

Let us view 752 in juxtaposition to the defendant's own flow sheet. Now, your Honor is very familiar with this sheet, and I believe you have an arrow at this point that indicates the end of the plain cellophane manufacture. All of this coating, solvent recovery, and mixer is completely foreign to this agreement, because it concerns moistureproof cellophane and it was not even invented then.

Now, the slitting and the packaging and the shipping, I certainly hope that Du Pont is not coming into this Court in 1951 and arguing that there was a secret process in the slitting of cellophane or the packaging of cellophane and in the
8145 shipping of cellophane. I think anyone knows how to use a razor blade and pack it in a box and put it on a train.

So now we go to the left-hand side, and what do we have left, your Honor? What were the real steps in the manufacture of the plain film? All the way down here we have the chemical building operations. All these steps involve the manufacture of the viscose solution. Then we have the casting and then we have the drying.

Now, was the secret process in the chemical building? We say no and Defendant's Exhibit 752 says no.

In 1923, your Honor, Du Pont was in the rayon business and they made a viscose solution for their rayon yarn by the same process that the French had made viscose for cellophane. For proof of this statement I need only refer your Honor to the second paragraph of page 2 of this exhibit, Defendant's Exhibit 742, under the section "Chemical Building," and I quote:

"The operations carried out are practically identical with those at Buffalo, viz., caustic solution Preparation, Steeping, Shredding, Alkali Cellulose Ripening, Xanthating, Solution Mixing, Screening and Cooling."

The process was the same as the Fibre Silk Company's. There was nothing secret about the entire chemical building process steps. Du Pont knew it all to begin with, and the first fifteen

pages of Defendant's Exhibit 752 go on to inform them of those valuable secrets that they already knew of.

8146 What do we have left in this whole process, your Honor? From their own diagram, I believe we have the casting and the drying. Now the secret process must be here somewhere. Let us look at the drier.

In Defendant's Exhibit 742, Pages 40 to 42, are directed to the drier and to the casting machine. Reading from the 1st paragraph of Page 40, "The casting machine drier is an adaptation of the drier used in paper manufacture." What is that? Paper manufacture? You mean you dry cellophane somewhat like you do paper, with hot air and hot water?

Pretty amazing, your Honor. It must have been very secret. And if that isn't enough, the fact that the drier wasn't secret, I refer your Honor to Page 5465, Government Exhibit 392, where Mr. George Rocker, a patent man in Du Pont, discusses the proposed French application for a patent on this drier.

Now, this is way back in 1923, when they went into the agreement, and Mr. Rocker says he doubts if they will ever be able to get a patent because the device is an old one and is identical to a patent of Charles E. Moss issued in 1906.

And furthermore, Mr. Rocker says at the bottom of Page 5465 that he knows of another feasible manner of drying cellophane, a method which has long been used to dry cellulose ester films where the shrinkage is just the same.

8147 So, your Honor, it was clear on the facts that there was nothing secret about this drier, and moreover the particular drier wasn't even essential to the cellophane process. They could have used the method of drying that was well known for the drying of cellulose ester films.

Now, let us go back again, your Honor, if you will, to the flow sheet. On that flow sheet we have only one thing left, the casting. Now, the secret process, the only way I can see it, must have been in the casting operation. And if we turn to Defendant's Exhibit 742, we will see that the vast bulk of its contents are directed to this casting room and various baths, and the tanks for the baths that are used in the casting process.

Pages 16 to 98, inclusive, are directed to the cellophane casting process. Starting from the hopper, this document tells us that the film passes through 14 consecutive baths, each of it give it a different treatment, until it finally reaches the drier as finished film.

742 sets forth the functions of these baths, coagulating, washing, bleaching, more washing, and so on. All of this looks and sounds pretty complicated, so I guess we have at least reached a secret process.

Now, your Honor, in 1911 Brandenberger had a patent issued to him on the manufacture of cellophane. We are not
8148 trying to say that the particular casting steps found in DX-742 were disclosed in that patent, but I would like to direct your Honor's attention to another Brandenberger patent, one of the patents your Honor has taken judicial notice of, and that is U. S. Letters Patent No. 1,548,864, filed June 19, 1923, issued August 11, 1925. If your Honor will go through the casting process disclosed in this patent, this patent is entitled, "Manufacture of Viscose Film, and if your Honor will compare the process describing the patent step by step with the 14 bath processes in Defendant's Exhibit 742, he will see that this patent fully discloses the identical process described there.

And, your Honor, it is this patent that Mr. Rocker was talking about, the Du Pont Patent made again way back in 1923 at Page 5466 of Government Exhibit 392 under the heading "Proposed Application for a Process Patent." And Mr. Rocker goes on to say that the steps of this process were mainly, and in large part, old in the art, but anticipated by two expired United States Patents to Stearn and Lehner, and he ended up on the next page, 5467, in the next paragraph, by saying that the claims of this proposed patent are absolutely worthless. And the subsequent events proved Mr. Rocker to be a prophet, because the U. S. Patent Office took the same attitude about this process, and the patent issued with only very narrow claims.

8149 However, the complete disclosure of the process was made to the public in 1926, and certainly it couldn't have been secret after that date. And as Mr. Rocker said, most of the—most of it was known long before 1923.

Now, your Honor, as I see it, we have found through this entire flow sheet——

Mr. GESELL. Oh, no, you haven't discussed the hopper at all.

Mr. FITZPATRICK. We still have not come up with any secret process. Process does not involve a machine. A process is a method of making something. There was no secret process involved. The process was known to the world. Part of it was known by the Du Pont Rayon Division, and part of it the French tried to patent, and in doing so, they irrevocably disclosed this information to the public. And just because the subject matter they tried to patent was anticipated by prior art and the patents they received were worthless, they cannot now argue that the process remains secret.

Now, of course, your Honor, much of the data contained in Defendant's Exhibit 742 did not appear in the patents which issued on the basic process itself. There were many things, a list of blueprints of machinery. There is no proof that any of those

machines, that any of those blueprints, were essential to the process itself. There is a lot of other information in this De-
8150 fendent's Exhibit 742 on Page 16, Du Pont was told the following, "The room is heated by steam and lighted by electricity. Condensation drops on the workmen."

On Page 17, "filters are cleaned by lifting top with traveling chain hoist, brushing screen and filter plates thoroughly with an ordinary scrub brush, flushing detached parts with water, and reassembling."

Page 19, "Continued immersion of hands and arms in acid bath, causes them to redden. They should be washed in water promptly after immersion. Grease with oil of vaseline if skin is irritated."

Page 109, in the cutting room, "The head inspection girls are paid from 1.5 francs to 1.7 francs per hour."

Page 113 told them that cellophane shipments were sometimes made by motor truck and sometimes even by parcel post."

Now, your Honor, all of that information may have been secret. We do not know. But there is one thing we are sure of. It didn't have the slightest connection with a secret process for making cellophane. Maybe you could call it know-how or practical engineering data. Certainly the blueprints were the latter. But, your Honor, the process itself was not secret, and to our view, the transfer of information of this nebulous type that could be the basis of a territorial division of international markets, we believe, is stretching the point a bit too far.

8151 We are not going to argue that much of this information was not helpful to Du Pont in its desire to make a 30 per cent return on its investment, but we are going to state categorically that the facts are self-evident that none of this information was so important that without it Du Pont could not have gone ahead and made cellophane anyway. They had the basic viscose technology in their rayon manufacture, and the rest of the essential steps in this process were available in the French patents. And since there was no secret process used, only know-how or engineering data, it cannot and could not possibly form the basis for valid ancillary restraint.

The Defendant, your Honor, cannot point to a single solitary legal precedent which has upheld a division of territories upon the transfer of information such as this.

Now, if your Honor please, and with the defense's permission, I would like to make one very brief comment in respect to six documents which have not yet been proposed.

Mr. Gesell. No, I won't permit that. I made the division at Mr. Minicus' request, and I think we better stick by it.

Now, let us take up these three points for a moment before the luncheon recess, your Honor. It is very illuminating to get the

Government's position, even though it is now almost a year since they first enunciated it in the Courtroom, because it discloses the fundamental premise upon which they have been
8152 operating. I think we now have the issue focused on this secret process or secret inventions in a way that will bring it to a head very quickly.

I cannot anticipate the proof of the witnesses, but it is clear that we have got basically this between us, as to what in law is a secret invention or a secret process. The Government, obviously, takes an extremely narrow view, whereas I am confident when we come to it, your Honor will find the cases are much broader.

I think also they argue in an a priori way which is unrelated to the practical business problems, they talk about knowing the viscose technology. Let us just deal with that for a minute. Surely we know the viscose technology for making rayon. Our proof will show that when we tried to apply that to make cellophane, it didn't work.

If he reads this report more carefully than he has, he will find that among the information which we received from the French as to this viscose stage of the process was detailed, specific, confidential, secret, inventive information as to the viscose indexes necessary for the casting, something based on years of French experience as to which we had none, because the indexes for the casting of the viscose for cellophane are wholly different than the indexes for rayon.

8153 So he overlooks that. He doesn't understand it. And when he comes to the casting room, the best he can do is to say that a patent issued in 1926, and, therefore, it wasn't secret information in 1923, when we got it from the French.

Throughout this, your Honor, he overlooks the composite importance of all the details of the process. He says we didn't know anything about it. Well, he overlooks the documents that show we were in France and had seen the product before we signed any option agreement, and we knew these people were in the business and were making a good product. That to us, as businessmen, was some indication that they had information that was useful and desirable and significant.

It is very easy to look back in 1951, but it is quite a different thing if you judge the question of the capital involved and the obligations that Du Pont was undertaking, of construction directly to the final plant stage, as to whether or not they should have entered into this agreement which gave them this essential data.

Our proof will show it was essential, and our proof will show it was secret. Ultimately, I guess, we will come down to a law question as to whether or not this is the type of information sufficiently

secret, sufficiently important and significant from the point of view of invention to justify the license agreement. We say it is.

8154 Now, on what they call the second joint venture, Mr. Fitzpatrick overlooks a couple of points that relate to that. He overlooks that the French became substantial shareholders in Du Pont. So the significance of the language that he refers to about shareholders isn't quite what he holds it out to be.

The COURT. Before we pass the 1926 Brandenberger patent, did Du Pont actually operate as licensee under that patent?

Mr. GESELL. That was one of the patents that was licensed under the agreement.

The COURT. Proceed.

Mr. GESELL. On the question of the joint venture, he overlooks the fact that they became substantial shareholders in Du Pont. Mr. Gillet went on the Du Pont Board. There was an exchange of both the Rayon Company and Du Pont Cellophane Company stock with Du Pont stock, and he overlooks the provisions of the bylaws with respect to the number of votes required by directors on appropriations in excess of $10,000.

He overlooks entirely the whole raft of his own evidence that shows that, in fact, all the operations of the Du Pont Cellophane Company functioned with a complete exchange of views between the two groups. Throughout this period they were consulted, they were present, they discussed business problems.

8155 In the last analysis, that would seem to be something of a test as to whether or not they were working together.

And then on the question of intent your Honor, it seems that we are to be said to be monopolists because we relied on representations made to us by La Cellophane, with whom we had had cordial and other business relations prior to that time.

Now, certainly, that isn't the basis upon which an insidious intent to monopolize, which they say has continued ever since, can be founded. We saw this product. They told us they had the means for manufacturing it. We accepted their word. It turned out that they did have. Some of the patents weren't as strong as they thought they were, but it turned out they did have.

They cooperated with us fully, and we went ahead and built it on their plans, on their design, using their workmen. But because we accepted their representations about patents before we signed an option agreement, he says we had a monopolistic intent.

Now, that seems to be stretching beyond the breaking point. Then he points to the option and says there is no clearer proof that this wasn't secret information. Then the fact that the French insisted in the option that if we saw their process we

8156 wouldn't enter the business for five years, well, can there be any clearer evidence that it was important, that it was significant, that it was secret?

Then that they would not disclose at our discussions their actions without a commitment on our part that if we got that secret information and those secret processes and knew of them, that we wouldn't enter the business for five years, they were protecting the secrecy of their information, and the option itself shows it.

Now, if your Honor please, we start the next section. Perhaps we can do that after lunch.

The COURT. Very well. We will recess until 2:15 o'clock.

(At this point a recess was taken until 2:15 o'clock, p. m., of the same day.)

8157 2:15 O'CLOCK P. M., THE SAME DAY.

Present: As before noted.

Mr. GESELL. We are now, your Honor, at Exhibit 762 at page 1620. There is already considerable evidence in the record that at various times in these early days in 1929, 1930 and along in there Du Pont had opportunities to buy Sylvania or to buy a controlling interest or a substantial stock interest in Sylvania which Du Pont declined in all cases to do. Now, we consider that evidence which the Government offered as being quite significant as to this whole issue of intent and purpose and monopolistic design, because here came people saying that Sylvania was available, offering us the stock, and we refused to buy it.

We filled out that evidence here in three documents. The first is 762, which is another incident that was not covered in the group the Government had, and you see there Mr. Yerkes writing in 1929 that the lawyer for Birn & Wachenheim has been in to see Du Pont with a proposal that Du Pont buy a 51 per cent. interest in Birn & Wachenheim, their asset being the exclusive sales contract for the United States from Sidac. This contract, the document says, covers the exclusive sale of Sidac material whether made in Belgium

8158 or by a Sidac company in the United States. In other words, here was a chance to isolate from the U. S. market both import-wise and domestically the manufacture that Sylvania ultimately had here and Sidac had abroad resulting from Sidac's theft of the secret information for which they were prosecuted abroad and which Mr. Fitzpatrick said was not important or secret. But here Mr. Yerkes says, "I told him we were not interested," an incident showing lack of monopolistic intent.

763 is the reply to a Government exhibit GX-66. In the Government Exhibit 66 Mr. Chase indicated an opportunity was available to purchase stock abroad, and here is Mr. Yerkes writing him a letter in which he says, "I really do not get excited about this

thing, but if you get any further dope from time to time I know you will keep me advised." And then his telegram in 764 comes a year later. This ties into GX-68 and GX-1116 in which he turns down an opportunity to purchase and says, "Definitely not interested. Yerkes."

That is all there is to that group. It completes and reinforces the point we made on the Government's document.

765 is merely the formal contract cancelling the Du Pont-B. C. L. agreement, and your Honor will recall that in the amendment to the answer, Paragraph 41, which we filed March 29, 1949, and that appears by way of italics on page 53 of the print, that agreement was cancelled, and these are the provisions of the cancellation agreement.

8159 766 and 767 relate to C. I. L. 766 is really prepared in response to a question of your Honor at page 84 of the transcript in which you inquired what percentage of C. I. L.'s business cellophane sales accounted for, and here we have run it. I think at the time off the cuff I gave the statement to the Court about 5 per cent., and here we have covered it for the years indicated from 1939 to 1950, and it runs from a low of 3 per cent. in 1942 up to as high 6.7 per cent. in 1950.

In 767 we felt we should present to the Court the present agreement which governs C. I. L.'s operations under patents licensed by Du Pont and technology licensed by Du Pont, which of course includes cellophane film, both regenerated and transparent, as appears on the schedule "Products" at page 1635 of the exhibit.

The COURT. Will Defendant's Exhibit 767 come under the attention of Judge Ryan?

Mr. GESELL. I am not sure, because the Government has tendered a proposed decree as to C. I. L., and has not asked that this particular agreement be stricken down. On the other hand, the whole question of who is going to have stock in C. I. L., how it is going to conduct its business is before the court, before Judge Ryan, and undoubtedly this contract, your Honor, will fall in the process of dealing with the Government's requests there if Judge Ryan finds them acceptacle under his opinion.

8160 This is a bilateral agreement which was entered into on August 19, 1948, and is confined to the relations between Du Pont and C. I. L., and it took the place of a three-cornered or tripartite agreement which had been in effect, to which I. C. I. was also a party.

The COURT. Just for a point of information on Defendant's Exhibit 765 I see that the signatory on behalf of the Du Pont Company is Mr. May and he is only General Manager, whereas on Defendant's Exhibit 767 Mr. Swint is known as a director of

the Foreign Relations Department. Just for my own interest what is the distinction between a General Manager and a director?

Mr. GESELL. Well, the Foreign Relations Department is not an operating department like the Legal Division or like the Service Department and other departments. I think the title director frequently goes with the non-operating departments of the company, whereas the Rayon Department is an operating department and generally carries the title Manager. They are both heads of their particular departments. I don't think it indicates any difference in status at all, your Honor, the two titles.

Then over in 768 and 769 we simply have two documents giving interpretations of the C. I. L. contract as it relates to cellophane. The one in 769 shows that we consider as we are under the terms of the agreement free as far as commitments with C. I. L.
8161 are concerned to license a United States manufacturer to manufacture in the United States and sell in Canada. That was in reference to the Olin license which we are coming to later.

Then at 770 we have a group of documents that continues for quite a pace here, and we are dealing with a specific contention of the Government, and I think as a preliminary here I ought to recall what we understand the issues to be. Your Honor recalls the Government says we were parties to two cartels, the so-called agreement cartel, by which I think they mean the arrangement between Du Pont and La Cellophane and its foreign associates resulting from the formal license agreements which are in evidence here. That is the agreement cartel. And then we were also party to a world cartel, by which they mean a series of commercial understandings over and beyond the license arrangements with La Cellophane which are supposed to have comprehended a large number of additional European and other producers.

It has been our contention that our only foreign commitments and arrangements were those which were specified in the formal written license contracts and that we did not join in what Mr. May called in his documents "the fancy European consortium"; and what we are doing here in this series of documents is presenting material directed to the Government's contention that we were also party to this fancy consortium or non-agreement cartel.
8162 That charge narrowed down particularly to a charge that we agreed with La Cellophane to fix prices and to quota business in South America as the result of an agreement made in 1930 by which Du Pont obtained broader rights to export in consideration for La Cellophane having allowed Sidac to bring La Cellophane's secret information into the United States for the formation of Sylvania, which was contrary to the exclusive rights to that information which we had gotten under the agreement with the French.

Now, that agreement the Government has sought to say was an agreement that involved us in this European cartel, and we agreed to fix prices, and we agreed to quota business on a fifty-fifty basis with La Cellophane in South America. Mr. Tubridy at transcript 274 emphasized the price point and at 369 the following is found:

"So that they would both end up," the transcript says, "with 50 per cent. net at the end of the business year is the French position. Our position is that that is what Du Pont agreed to do. They agreed to quotas in South America. These quotas were set up by this consortium. La Cellophane had rights in South America based upon these consortium arrangements. Du Pont was to get one-half of the French rights."

Now, it is to that issue that these documents are directed.

Of course, our starting point on it is that the Govern-
8163 ment's own proof disproves what they are claiming, be-
cause their GX-1022 categorically states in a letter from La Cellophane to this effect: That "owing to the fact that you prefer not to join the convention"—those were La Cellophane's words—"we can't keep Wolff from your markets." What we want to do is simply develop that theme further and show by concrete evidence that there was price competition and that there were no quotas in these markets that Mr. Tubridy was talking about.

Now, the first exhibit is 770-A, and that is pertinent because the Government offered in evidence GX-1395 in which Wolff proposed a price deal. They did not offer the reply. This is the reply. I direct your Honor's attention to the last paragraph:

"As regards Transparit"—that is Wolff's cellophane—"we would prefer to refer the matter to Mr. Yerkes who is just returning from abroad, and therefore will reply after obtaining his views; but of course we cannot agree to any understanding to support prices in this country, as that is not lawful."

Then the next document is of interest as a preliminary to this South American story. It is written in 1929, which is before the 1930 agreement that the Government points to. There you will see that Du Pont was interested in broadening its markets to go into South America, even at that early date, and that Mr. Pickard said that the matter had been discussed with Mr. Bernheim.

8164 Then we come over to May 1929, in which Mr. Yerkes is again urging to Blum that we want to develop the markets in South America. You will see particularly the third paragraph in which he suggests that we ask Arena to withdraw the restrictions contained in the contract and allow us temporarily, at least, to sell in South America, to develop the possibilities of the market. We were keen on exporting to that area, and seeking a relaxation of the license agreement.

In passing, you will notice the last sentence. "You will remember, of course, that Kalle have no right to sell in the United States, but Wolff have."

Of course, under the consortium that the Government is talking about, they wouldn't have.

Then in 773, the French simply say they are not a bit in favor of letting us go into South America, and they turn us down.

Then we come to 774, and this is after the—this relates to Mexico. You will see there some examples of Wolff and others trading in North American territory, which included Mexico, and North American was supposed, under the Government's theory, to be reserved to Du Pont by the consortium.

You will see though on Page 1650 that Transparit is selling—that is the German product—through Agencia Commercial Anahauc, and that it states "Price seldom the same to any
8165 two clients but usually somewhat lower than our published price list for Mexico."

You will see another agent mentioned, referring again to the German material coming into that market, "price very irregular, sometimes higher—"

And over on the next page a number of similar quotations, talking from Page 1651, here is an agent who sells the German product along with glassine and other types of papers, "Prices vary with each customer, but always in U. S. dollars."

And here is another agent that carries a stock of German P. T. along with other wrapping materials.

Here is another agent who is advertising the German product along with lots of other papers and wrapping materials, and they state as to him that he is not a very active competitor. They say these agents make no attempt to render you service, but seek the business entirely on a price basis. And there are further references of the same kind.

Now, that is in Mexico, that is in 1930. The report is as of 11-1-30. And that is the period that everybody was supposed to be clearly out of our market. We were supposed to have joined the consortium, and cartelization was supposed to exist.

Now, here we come to Argentina in 1931, in Exhibit 775, and there we find that the La Cellophane agent, Simon Hermanos, have provided this particular biscuit manufacturer
8166 in Buenos Aires with French cellophane which they claim is moistureproof, and Beckwith is going to run tests of this material as compared with ours.

Over on the next page you see reference to them as competitors.

Then we go over to 1655 in Exhibit 776, and you see an analysis of prices quoted in 1931 in Buenos Aires in the market place in

that year, and on that basis you see that Sidac's price is $46 per thousand square meters.

La Cellophane's price is $55.

Wolff's price is $55.

And the Du Pont price is $40.12. This is the price fixing that Mr. Tubridy was talking about, a complete disparity of prices and quotations in the same market at the same time, and evidence of competition between Wolff, Sidac and ourselves in that market.

In 777 we have an important letter which was omitted in the Government's case. You will recall that from time to time they put in letters showing where the French were writing us and saying, "Tell us what your sales are. We have a quota arrangement."

And we forced the Government, with your Honor's assistance, to put some of those replies in to show the picture. The replies that came in show that we didn't honor or recognize such a quota.

8167 Here is another one. This is a letter in 1932 to GX-1467, in which we refer them to our earlier letter, and refuse to talk quotation again.

Then in 778 we have an extract from a foreign memorandum by Mr. Andrews in which he comments in 1932 on the Brazilian market, especially Rio de Janeiro, and he talks about agents for La Cellophane and Sidac being active in that market, and talking about the competition which is being encountered.

You will see that we say that we should be able to meet Flogny—that is the La Cellophane agent—on at least an even basis with R. T., and eliminate him from moistureproof practically entirely, hardly indicating a quota understanding.

Then in 779, here is a letter from Mexico, and I again remind you how this ties in with our claims, that these people were selling in a market from which they are supposed to have been excluded by the arrangement that we are supposed to have entered into. And you see on September 1, 1932, that both Wolff and Du Pont are selling in Mexico in competition, and that their prices are different on plain, on moistureproof, on colored film, on rolls, and the prices are set up, and the difference is spelled out.

780 reflects a competitive price situation with La Cellophane's agents approaching Armour and Swift with price
8168 reductions trying to get their business. That is spelled out in the p. s.

Then in 781 we have a reference to the Germans underselling us in Cuba. This is more North American territory under the agreement, Germans underselling us by a difference in price per case of $30.00.

Then take a look at Mr. May's letter, your Honor, here in 782. This is at the time that the Government put in GX-1031 and some

of these other exhibits which suggested that the French thought there was a quota arrangement, and we insisted that the Government put in GX-1031-A, which was Mr. Yerkes reply to Mr. Brandenberger's letter, GX-1031, turning him down.

Here you see what happened behind the scenes. Here is what Mr. May wrote to Mr. Yerkes just before Mr. Yerkes wrote 1031-A in reply to Brandenberger's letter on this question of quotas, and Mr. May is the man who is supposed to have made this fancy European consortium deal, and look what his letter says "Just what the various European arrangements were in regard to plain transparent we could never understand. That is why Bernheim was told on June 2, 1932 that we would follow our own course.

"Equal rights on moistureproof could mean nothing but the quality of opportunity. We pioneered the moistureproof but have made no money. Take Japan as an example—sales
8169 there were all moistureproof, up which, during 1933, we lost $3,685.82. Why should we, after sending representatives to South America and Japan, and incurring a large expense in so doing, simply hand over to La Cellophane 35,000 pounds of business? What have they done to entitle them to it?"

And Mr. Yerkes writes back and tells Mr. Brandenberger to go peddle his papers, that they never made any deal on quotas and to fix prices.

The Government wasn't going to put in 1031-A, and this one shows why.

In 783 there is more discussion of the price competition in the Argentine. It says "It is evident from this that Sidac's agent is being permitted to sell locally at his absolute net cost, and that the expenses for doing business in Argentina are probably being absorbed as selling expense by the factory."

Then 784, I would, your Honor, to hand up a more legible copy of that document. I have handed one of these to the Government, since it is a hand-written note.

There you see price competition, and a pull and tug for business on this account in Columbia between Du Pont and Henry, who is the Sidac agent in Bogota. He first loses the business on a price basis, and then later is called up and goes back, and because the difference in price is less, get some of the business.
8170 786, we are talking to an agent in Colombia, and we say that we are under a handicap as to price, we can't meet our competitor's price. This is in 1938, and we say if you want to handle our business, you have got to sell it on a quality basis, because our competitors undersell us and we can't get down to that price.

Now, is that price fixing?

787 is a report of the commercial department to the Cellophane Division, and Clar-Apel, which is mentioned in this document, is the name for the Du Pont cellophane in the foreign export market, your Honor. You will see the last paragraph on 1667, "Sales of Clar-Apel Standard Size Sheets could be increased considerably if we were in a position to meet, if and when necessary, the prices quoted by competitors. Of course, we think only of the German and Swedish agents, since the differences between our prices and those for Japanese paper are so large that it is almost out of question to meet them."

Well, doesn't that say in clear words that the Japs are way below us, we can't reach them, and that the Germans and Swedes are selling below us?

Even the price is fixed, says Mr. Tubridy.

788 at 1669 is a further document concerning price difficulties in the Brazilian market. It says, "However, in view of the fact that you are placed in such an unfavorable price position in regard to regular Clar-Apel, we suggest that you put forth a special effort on the moistureproof film which you have a better chance of selling in competition to the European houses."

8171

And he says over on Page 1670, "Our experience has always been were we to meet the prices now offered by Europe, it would only be a very short time before even lower prices would be submitted by these same companies. There seems to be no limit to what they will quote to get business."

789 is a document in 1939 relating to the Argentine. It talks about competition with Sidac and competition with La Cellophane's former agents. It shows other competitors from France and Italy selling in the market.

"European countries seek export business even at prices that barely cover out-of-pocket expenses of production."

And then there is a yearly report of Duperial, your Honor, which I think is of particular significance, dated 1940. And there they analyze the estimated consumption in the Argentine market. You will see that there is no quota relationship of any kind between Duperial's U. S. A. sales, which are the sales of DuPont cellophane, and the French sales.

29 percent as against 14.

37 as against 7.

37 as against 17.

37 as against 15.

8172

And 38 as against 13. They were supposed to have been 50-50, according to Mr. Tubridy, at Page 369 of the transcript.

Then the discussion of the competition in that annual report in 1674 "during the fiscal year 1937-38 our principal sources of competition, in order of importance, were from Belgium, France,

Italy, and Great Britain," and there is more discussion of the competition, and with more particular reference to price quotations in 1675.

So that group of documents, your Honor, we offer, and I should formally offer, I guess, all of them that I have discussed since the recess, at this time, so the record is clear.

("Defendant's Exhibit 762 to 790," inclusive, were received in evidence.)

Mr. GESELL. It is a group of documents which establish, from our point of view, that all we secured as a result of the negotiations with the French was a broadening of our license rights which enabled us to sell in South America in that certain period, and we sold in competition with the French, and with their various foreign associates in this consortium that the Government likes to talk about; that we did not fix prices and we did not quota business.

8173 Now we come to another issue in the case, your Honor, an issue the Government has spent a good deal of their time and trouble on. And there again I ought to go back to recall what the problem is:

On October 17, 1940, Letter agreements were written by DuPont to the various licensees of La Cellophane and La Cellophane saying that from that date on we didn't recognize any limitations based upon the use of technical information, and that both parties were free from October 17 on to sell in each other's markets except as barred by patents.

Then that condition existed until the formal cancellation of the agreements later as a result of the war conditions.

Now, the Government's position with respect to this is that these were purported formalities, that they had no substance, that they didn't mean anything, and that there was a persistence of Du Pont's foreign understandings in precisely the same form as they had existed prior to October 17th.

The position is stated, for example, by one of its counsel, "Certainly commercial operations at the international level in cellophane and caps and bands from 1940 to the date of the inception of this action present no indication of subsequent changes
8174 in the way of doing business. In fact, the evidence is all to the contrary."

Then in the complaint itself there are, I believe, allegations as to the bona fides of this particular cancellation, which you will find in Paragraph 41 of the complaint at Page 52 of the print.

Now, as with so much of this foreign situation, I find some difficulty in grasping its pertinence to the monopoly charge. But we do feel that what we ought to do here is to negative some of

these collateral issues as we go along, and here again, therefore we take one up and try to deal with it in a succinct way in a group of documents.

Now, 794—I should, perhaps, refer first of all to these export figures generally. I think your Honor is fully familiar with them, in 791. All we have done here is to bring some of the information up to date. We have used Government materials for the years that they had it, and then on the basis of invoices have brought the information on up to date.

You will see in 791, exporting business developing from 1940 on to various countries where we were supposed to have been excluded, and if the Government's theory is right, from which we would persist, since as they say, there was no indication of any subsequent charge in the way of doing business. But you will see
8175 that, in fact, there are exports occurring in various years and in various quantities to a whole group of countries that were either in the so-called French licensed territory or B. C. L. licensed territory, or the German licensed territory. And we have spread the figures across the board.

The COURT. I hope that I do not annoy you by my irrelevant questions sometimes.

Mr. GESELL. No, you do not.

The COURT. That is an odd figure of 107,000 pounds for Java in 1941.

Mr. GESELL. 170?

The COURT. 107,000.

Mr. GESELL. 107,086.

The COURT. Yes.

8176 Then you will see over on page 1678 a listing of our agency appointments, your Honor, in various foreign countries as of three dates, 1945, 1947, and 1950, formal contracts or letter agreements with various agents in those markets who acted as distributors, and that is carried on over on page 1679 to show the situation for those same years in other countries. You will note that we had an agent in Java, your Honor, in 1945. I don't know the circumstances of that transaction, but we had them in Portugal, South Africa, Luxemburg, South American countries, and various European countries—Belgium, Bermuda, and so forth.

But now apart from the statistics—and we are always in trouble under these statistics because the Government will say well, this was war time or this was dislocation and the other fellows could not supply, or you did not really mean it, or it is not a very large quantity, or we didn't know about it, or it was not consistent in all years—let us look at what we were trying to do. If you see

what we are trying to do—and this is clear from the documents—there isn't any question that there was a change in the way of doing business. 794 is dated October 18, 1940, which is one day after the October 17th letter, and what is it? It is the sales manager writing to the export manager on a prospect list, and he says, "Please send me as promptly as possible the lists you have been working on

of prospects in territory which hitherto has been closed to
8177 us." Well, that looks as though he is thinking of doing something different; and if you will follow the story through you will see that a prospect list comes in in 796 which reviews in detail the situation in a whole series of different foreign markets, who would be possible agents, who look promising, what contact we may have had with them, who they are, what their tie-ups are, and you get some indication of the problems of doing an export business at the same time, problems of exchange, problems of licensing arrangements, particularly with respect to the British Empire. But there is an analysis of a whole series of markets all over the world.

Then we have in the next document 797 a memorandum from Mr. Hatt who says he has been over this and he says, "in most cases it will be a waste of money, because in many of these countries described there are conditions that would prevent any satisfactory operations; and, secondly, in the case of countries in the British Empire I think to a very great degree they are getting what they require out of England, where I understand the shipment of all regular export trade is carried on to the greatest extent possible under these trying conditions."

But then he goes down the list and he picks up various places where he thinks we have an opportunity, places which were in the

other people's territories before, and encourages that we go
8178 ahead and try to get business in those various markets.

He does say that the Executive Committee, your Honor will note at 1691, has asked them on the QT not to sell to Germany, Italy, or Japan. Of course, this is in 1940. We are not in the war yet, but we don't want to help people who may be potential enemies. And so he rules out Germany, Italy, and Japan. But he covers Netherlands, China, Iceland, Portugal, West Africa, Iraq and other countries.

Then he says, "If and as new inquiries are received from legitimate concerns in other countries, consideration might be given to handling them on the same line, namely replying, offering them our material in the regular fashion."

Then Brown pinpoints this thing further by setting up a policy as to where we want to sell, why we are selling certain markets; he suggests we go back and look over prospect lists and follow up all inquiries and accept all orders from the British Empire.

So then in 799 is another one on export policy in which he says we should diligently follow all inquiries and accept all orders, but do not solicit agencies, referring to the memorandum of the 5th, in which he mentions certain countries where that should apply; and then he says, "As to past inquiries, it is perfectly proper to re-open their interest . . ." We had gotten inquiries from people in the past. Get hold of them, in other words, and find out whether they are still interested. He says start in Egypt,
8179 start immediately, start reviewing your 1939 and 1940 file. Promote the business. Any inquiry from any part of the world. This applies specifically to Egypt, South Africa, and any British possession or protectorate nation as well as any other country.

Then here is an example of a re-opening letter in 800 where we write to a fellow who previously we had turned down, and now under new conditions we write to him and follow up on it. There is more of that in 802.

Now, we then come, your Honor, for the rest of this volume up until 856 to a series of examples that run on into the late 1941 and on after of our solicitation and development of business in various parts of the world. I want to withdraw 822 in that group and to offer all the others up until 856. These examples are examples which we have chosen to show that our interest in these markets to which you see export figures is not just a casual interest; that we are working with agents; that we are encouraging them to develop business; that we are continuously answering inquiries and that we are continuing trying to develop our export business.

Now, we have two as to Portugal, 802; we have one as to Sumatra, 803; we have one as to the Canary Island in 804; we have several as to Australia, 805, 807, 855; one as to Turkey, 806; three as to Iran, 808, 809, 810; a couple as to China, 825 and 826; several as to Finland, 827 and 828 and 854; England, 847 to 849;
8180 Iraq, 811 to 813; and then also 834 and 835; and the Dutch East Indies, 814 to 816; and Egypt in 817.

We have documents as to West Africa, 829, 830 and 831; as to Denmark, 836; as to Belgium, 838, 839, and 840; as to Switzerland, 841, 842, and 843; as to Italy, 844, 845, and 846 which is after the war; as to Luxemburg, 850 and 852; one as to Norway in 853.

Now, some of these are as late as 1949, particularly as they relate to countries which were prior to that time embroiled in the European conflict. But what we have tried to do is to give by these documents some meaning to the statistics themselves and to show that as to these markets we were in correspondence with agents and we were interested in developing their business and not simply accepting casual orders.

You will find——

The COURT. Will you go back again and tell me what Defendant's Exhibit 822 is?

Mr. GESELL. 822 I withdrew.

The COURT. I see.

Mr. GESELL. That is a post-war document on sales proposals of various kinds, and we feel that these other documents cover it sufficiently to remove that bulk from the record.

Now that, I think, deals with this question of the persistence of market division understandings.

We have finally under a rather broad heading here "Sources of Technical Information Available to Competitors and
8181 Potential Competitors" sought really in effect to give some background information as to the number of companies which were operating abroad in this field of cellophane under various trade names by an extract in 857 primarily from a memorandum in the files of the company which shows quite a list of different concerns who were making various cellophanes or transparent papers of viscose origin in various countries throughout the world and the names under which they go. Primarily I think, your Honor, this material will tie in against quite a number of miscellaneous references in the foreign exhibits to trade names of various materials, and so forth, and will enable us to identify who was the producer and what company's product they are talking about. It gives us the trade name as well as the names of the company, shows the concerns in England, Italy, Poland, Czechoslovakia, Holland, Belgium, and other countries.

There are one or two other identifying documents with respect to other foreign concerns in the rest of this group, particularly relating to some of the German companies. That takes us on through to 862, and I want to offer this group from 856 to 862 for the record.

Mr. MINICUS. Before we pass that, your Honor, the Government has one document that it would like to invite the Court's attention to, Defendant's Exhibit 793. Now, Mr. Gesell did not discuss that and we were waiting for him to get to the end of
his presentation before objecting to it. However, if
8182 793 is to go into evidence we would like to have an authenticating witness at some time from the Sylvania Company on this document.

Mr. GESELL. I withdraw the exhibit. I thought the Government would not press the objection. It came from their case. I withdraw 793.

There was one inquiry, your Honor, that your Honor addressed to me that bears a little on this general question of other cellophane manufacturers. You asked at page 4914 of the record in

connection with the discussion of Defendant's Exhibit 594 what was the status of the Egyptian cellophane plant that was mentioned in one of those documents, and I have made a check and I understand the plant is operating, went into production in 1949, and has been exhibiting its wares at recent shows in London in connection with the celebration there.

The COURT. Does a British company run it?

Mr. GESELL. I don't know who runs it, your Honor.

Mr. FORD. Your Honor, turning first to Section IX–B, which is headed "Opportunities Declined to Purchase Control of Or Interest in Sylvania," the first exhibits mentioned were Defendant's Exhibits 762, 763, and 764. The first of these documents is a rejection of an offer to purchase Birn and Wachenheim, who really had nothing to offer Du Pont at this time. The other two documents deal with the refusals to purchase Sylvania's shares of stock.

8183 As to this, I wish to point out to your Honor, first, Du Pont did not need to purchase Sylvania to maintain its dominant position in the domestic cellophane market and its control of that market. Furthermore, it actually wanted Sylvania in the market to create an appearance of competition. Evidence of this is expressed in Government Exhibit 1010 on page 1020, which is Mr. Yerkes' memoranda of January 14, 1930.

"Mr. Carpenter also feels that Wallach being established here and a competitor, it might be good policy for us to play along with him, so to speak, not in a technical way but in a friendly way, provided the benefits of this went to Wallach and his American Company and not back to the Belgian Sidac and eventually back in part to the French."

It is well to note when these documents were written. Defendant's Exhibit 762 was written some five years after Du Pont's cellophane plant had started production. Defendant's Exhibit 763 about nine years after, and Defendant's Exhibit 764 about eleven years after. Certainly the new company was well established in business by this time.

By correlating Defendant's Exhibit 763 with the letter it answers, which is Government's Exhibit 66, and also by correlating Defendant's Exhibit 764 with the letter it answers, which is Government's Exhibit 68, one observes another example of the operation of the cartel. Du Pont's coconspirators did furnish

8184 them with many and various types of information. In this case it was about investment opportunities in another company besides Sylvania.

The suggestions made here are too obvious a violation of the Anti-Trust laws; and, naturally, Du Pont avoided such commitments.

Section IX–C, "Termination of B. C. L. Agreement," Defendant's Exhibit 767 is a new Du Pont-B. C. L. agreement of August 1, 1948, cancelling the prior agreement. In this connection I simply wish to call your Honor's attention to the fact that the Government's documents already in evidence shows an extensive collaboration between Du Pont and B. C. L. until the filing of this suit. The date of this new B. C. L. agreement proves that the old agreement, which is Government's Exhibit 1109, containing territorial allocations, explicitly stated in Paragraph 10 thereof, was in force when the complaint was filed in this case.

Defendant's counsel has pointed out it was not until a pre-trial conference in March 1949, that Du Pont amended its answer to show this new agreement.

In passing, it should be noted that under the new agreement both parties retain the fruits derived from the patent rights already accrued.

Section IX–C, "New Agreement With C. I. L.," here Defendant's Exhibit 766 is simply a table comparing C. I. L.'s cel-
8185 lophane sales to their total sales. In this connection, your Honor, it is sufficient to point out that 2 and 3 million dollars sales in Canadian money represents big business.

Defendant's Exhibits 767, 768, and 769 is a new C. I. L.-Du Pont agreement of August 19, 1948, and two interpretative documents. Your Honor will notice that this agreement was made later in the same month in which the cancellation of the B. C. L. agreement occurred. Here we also find evidence of the effect of this suit upon Du Pont.

Du Pont is still one of the two major stockholders in C. I. L. and is represented on the Board of Directors.

Section IX–E, "Du Pont's Independent Selling Policy," and this is an interesting section: Defendant's Exhibit 770 is a letter from Du Pont's Mr. Haskell to Wolff & Company in 1929. This shows Du Pont avoiding written commitments with a foreign company involving an obvious and crude price fixing agreement covering the domestic U. S. market; and it proves nothing else.

Defendant's Exhibits 771, 772 and 773 deal with negotiations between Du Pont and Mr. Bernheim, relative to Du Pont's selling in the South American market.

First, your Honor, I wish to ask a rhetorical question. If Du Pont had a real independent selling policy, why did they negotiate with Mr. Bernheim at all? Since defendant's counsel did not read these documents, I wish to read certain sections of them.

8186 Defendant's Exhibit 771 is a letter from Mr. Pickard to Mr. Yerkes, dated April 1929, has some interesting language which should be called to your Honor's attention.

"In January of this year I discussed very briefly with Rene Bernheim the question of our selling cellophane in South America and he expressed the feeling that from a competitive standpoint it would probably be difficult, and of course he mentioned the limitation of our contract. He said, however, that this latter phase might *might* be discussed, and I think, if at any time we see our way open to any real business, which we are apparently in the best position to handle, the matter will be subject to reasonable negotiations with Mr. Bernheim."

Your Honor's attention is also respectfully directed to the third and fourth paragraphs of Defendant's Exhibit 772, which is a letter from Mr. Yerkes to Albert Blum in May 1929.

"My further suggestion would be, if you could get Bernheim to agree, to ask the Arena Trading Corporation (party to our original cellophane agreement) to withdraw or hold up the restrictions now contained in our contract and allow us temporarily to sell cellophane in South America in order to develop the possibilities of the market there and endeavor to determine whether we are in a better position to supply this market than they are in Europe, also with the understanding that they would be in a position to re-insert the restrictions at some later date.

8187 "If Bernheim is in a receptive mind about this, I could discuss it with him in person some time later in the year, as I told you the other day I am inclined to think that some time during this year I probably had better go abroad."

I also wish to call your Honor's attention to the first sentence in the second paragraph, Defendant's Exhibit 773, Mr. Bernheim to Mr. Yerkes in July 1929. Defense counsel glossed over this paragraph:

"The French Cellophane Company is not in favor of a change in the original agreement and does not see any advantage, especially in the present circumstances, to open the South American market to new competition, or that the French Cellophane Company withdraw from this market in favor of the Du Pont Cellophane Company."

I submit, your Honor, the above quotes, evidence the fact that Du Pont, as well as its co-conspirators, believe the basic agreement with La Cellophane controlled sales territory; and that it was by no means limited to technical and patent matters. In passing, it is worthwhile to note the first paragraph of Defendant's Exhibit 773, because it shows the role that Albert Blum and Henry Blum played as directors of Du Pont Cellophane Company and in the world cartel. Numerous Government exhibits also show them acting as intermediator between Du Pont and the French.

8188 Defendant's Exhibits 774 to 790 inclusive, are series of documents designed to show Du Pont's activities in South

America, as well as the activities of the co-conspirators in that market. Your Honor should note, as defense counsel has pointed out, in reading these documents that they are all written after March 6, 1930, at which time an amendment was made to the original basic agreement. This amendment is Government's Exhibit 1013, especially paragraphs numbered 1 and 2.

Mr. McGLOTHLIN. 1015, you mean.

Mr. FORD. 1013, March 6, 1930, I believe. By this amendment Du Pont's territory was extended to include all of South America on a non-exclusive basis. Two of the defendant's documents in this group deal with sales in Mexico, the rest with sales in South America.

The COURT. Will you go back to the last one again and give it to me?

Mr. FORD. This amendment is Government's Exhibit 1013, especially paragraphs 1 and 2. By this amendment Du Pont's territory was extended to include all of South America on a non-exclusive basis, and I would like to comment, that this really extends the principal territorial allocation. It is simply an adjustment of the allocation, is all it is. Two of the defendant's documents in this group deal with sales in Mexico, the rest with sales in South America. Hence, these documents only show
8189 that Du Pont was selling in South America pursuant to the amendment to the basic agreement with La Cellophane, and are not in any way probative of an independent selling policy.

Defendant's Exhibit 777 and also 782 deal with another aspect of the South America question. The first is a letter from Du Pont's Mr. Andrews to La Cellophane's Mr. Meyer, in 1932. The second is a letter from Mr. May to Mr. Yerkes, in 1934.

These two documents are part of the prolonged discussions with La Cellophane over quotas in South America in which Du Pont played a stalling game rather than definitely settling the matter. Defendant's Exhibit 777 was written subsequent to Government's Exhibit 1023, dated June 2, 1932. This was a letter from Du Pont to Mr. Bernheim, the last sentence of which reads, "Considering all of the circumstances, we must consider ourselves free to pursue our own policy of sales in South America, Japan and China." Government's Exhibits 1467, 1468 and 1469 are part of this discussion. These three documents are all written after Government's Exhibit 1023 and before the end of the year 1932. The matter then rode along until 1934, at which time we have another series of documents on this question, Government's Exhibits 1030, 1031, 1031-A, 1035 and 1037. The discussion appears to have dropped in December 1934, Government's Exhibit 1037; but not with a definite statement by Du Pont to their French col-

8190 laborators that what Du Pont sold in South America was Du Pont's own business. On the contrary, Du Pont definitely expressed a willingness to exchange sales figures with La Cellophane if it would produce the figures of the other members of the consortium. This is definitely stated by Mr. Yerkes in the last paragraph of Government's Exhibit 1037, which is his letter to Mr. Bernheim, December 27, 1934.

"If, therefore, with the above definitely in mind, you still want to exchange figures with us on South America and Japan, and if you will at the same time give us the figures of the other members of the South American consortium showing the quotas established for each and the extent which they adhere thereto, we will arrange to send ours."

I submit, your Honor, this is an expression of collaboration rather than independents.

We do have in evidence in Government's Exhibit 1031 figures showing the sales of Du Pont and La Cellophane in South America for the years 1931 to 1933, inclusive. With both parties possessing knowledge of each other's sales in the South American market, they were in a position to ascertain their relative position as to each other in this market.

Defendant's Exhibit 791 is a list of Du Pont's exports to certain selected countries. With the exception of the Philippine Islands, this is a list of Du Pont's exports since 1940 to countries
8191 outside of their territory. It does show Du Pont moving into their co-conspirator's territories during the war years, to fill the vacuum created by the war; and Du Pont withdrawal from these markets after the war. This is especially noticeable in the case of Australia and India; thereby showing Du Pont's intent to protect B. C. L.'s markets rather than capture them.

The great increase in exports (shortages not withstanding) in the years 1948, 1949 and 1950 as compared to the dearth of exports in 1946 and 1947 is impressive evidence of the effect of the filing of this suit upon Du Pont's foreign policy.

Your Honor will no doubt desire to give this table a little closer study. For the year 1946, we see only 76 pounds of cellophane going to these selected countries (Philippine Islands excepted); yet Du Pont's total exports were 4,502,516 pounds.

In 1947, the selected exports as shown in Defendant's Exhibit 791 were 3.3% of Du Pont's total exports, and 13 hundredths of 1% of total sales.

In 1948, the selected exports were 5.8% of total exports and 23 hundredths of 1% of total sales. If we substract the exports to the Philippines the percentages are 3.2% and 13 hundredths of 1% respectively. In 1949, these selected exports were 12.8% of total exports and 35 hundredths of 1% of total sales.

8192 Minus the Philippines, the figures are 8.4% and 23 hundredths of 1%.

This clearly demonstrates that only a relative small proportion of Du Pont's exports have gone to countries outside of their territory even in recent years. When compared to total sales, these shipments are neither a serious or significant part of Du Pont's cellophane business.

Defendant's Exhibit 792 is a list of Du Pont foreign distributors at the end of the years 1945, 1947 and 1950. Your Honor will notice that this table shows no distributors in England, France, Spain, Germany, Italy and the Scandinavian countries, i. e., most of the great industrial countries of Europe. With your Honor's permission I would like to go through this table checking the countries outside of Du Pont's territory and noting the years in which an agency appears or disappears.

The first non-Du Pont territory listed is Angola, and no agency appears after 1945.

Australia, no agency after 1945.

China, no agency until the listing for 1950.

Egypt, no listing in 1947, but re-appears in 1950.

Iraq, the agency is dropped in 1950.

Java, no agency in 1947, but re-appears in 1950.

Luxemburg, no agency until the 1950 listing.

Netherlands, no agency until the 1950 listing.

Rhodesia, not until 1950.

8193 Palestine, not until 1950.

Portugal, none after the 1945 listing.

Portug'ese East Africa, it appears in 1950.

Southern Rhodesia, 1950.

Switzerland, none in 1947, but re-appears in 1950.

I think that illustrates the same characteristic that these other exports do, Du Pont sort of withdrawing after the war, and in post-complaint times reasserting itself.

Defendant's Exhibits 794 through 855-inclusive, are a collection of different types of documents dealing with Du Pont's exports during and following the war. Very much the same generalization must be made as to this group of documents as to the table of exports, Defendant's Exhibit 791, as they show essentially the same facts. In this collection of defendant's exhibits, there are a number of documents showing Du Pont's export activities during the war. There is an absence of documents for the year 1946. Beginning in the last two months of 1947 and running through 1950, we have another series of documents which reflect Du Pont's post-complaint exports. At least in some cases, a single invoice found in this pages accounts for the total exports to the country named in the invoices for the year covered by the invoice. Ex-

amples of this are Defendant's Exhibit 828, shipment to Finland in 1948; Defendant's Exhibit 835, shipment to Iraq in 1948; Defendant's Exhibit 852, shipment to Luxemburg in 1949;
8194 thus showing that at least some of these exports were intermittent or isolated transactions rather than established business.

Defendant's Exhibits 794 to 799 inclusive, is a little series of documents giving a list of countries which might be prospects for exports. It is interesting to note the date on which Defendant's Exhibit 794 was written. It was written just one day after Government Exhibit 1276, dated October 17, 1940. Government's Exhibit 1276 is one of several documents which Du Pont sent to its co-conspirators in which Du Pont attempts to place a strict technical interpretation on its agreements with its co-conspirators, and attempts to repudiate any interpretation of these agreements to the effect that they contain sales or commercial restrictions. This interpretation appears quite inconsistent to the first paragraph of Defendant's Exhibit 794, Mr. Brown's memo to Mr. Andrews, reading:

"Please send me just as promptly as possible the list which you have been working on of prospects in territory which hitherto has been closed to us."

This and similar phraseology in letters immediately following, indicate that Du Pont believed their agreements restricted their sales territories.

A typical example of Du Pont's attitude towards the permanency of this prospective trade is indicated by the fifth paragraph of Defendant's Exhibit 797, on page 1691.

8195 "Regarding Australia, New Zealand, Union of South Africa, Egypt and other principal British Dominion, I believe we would best confine our activities, if any at all, to answering inquiries that we may get. I definitely think we are not interested at all in opening a new effort in British territory in which we have no contracts or inquiries."

A similar attitude is shown by the last paragraph, page 1693, of Defendant's Exhibit 798, which defendant counsel read, but I wish to point up the wording "but do not solicit agencies."

And this same wording was again expressed by Mr. Brown in Exhibit 799.

Before leaving these lists of prospect countries, your Honor should note that Mr. Andrew's original list of countries has been greatly cut down in size by Mr. Hatt in Defendant's Exhibit 797, and again by Mr. Brown in Defendant's Exhibit 798.

Certainly, these documents leave the impression that Du Pont is continuing to observe its division of markets with B. C. I.

Defendant's Exhibits 823 and also 855 deal with the Australian market. It is true that Du Pont gave more serious consideration to the Australian market than other countries outside of its territory. It should be noted that Defendant's Exhibit 791
8196 shows no Du Pont's sales to Australia since 1945. Defendant's Exhibit 792 does not show any distributer in this country in 1947 and 1950.

I believe that gives the impression of actually what is happening as to Du Pont's activities during the war and since the war.

Thank you, your Honor.

Mr. GESELL. May I just make three points, your Honor, by way of correction. The first is that the exhibit, which is the agreement made with respect to South America, is Exhibit 1015 and not 1013. There is a substantial difference between the two documents, and I want to be sure we understood that it was 1015.

The second point is that the Philippines are not part of North America. The activities of the Philippines were dismissed as unimportant, but they are not within North America as defined in the contracts.

The third is the emphasis upon the discontinuance of business to Australia will have to be read in relation to the import prohibition established by that country, as to which we will have proof, which refused to permit the imports of any cellophane, cigarette paper, or vegetable parchment after a specified date, in order to preserve dollar exchange.

Now, that completes, your Honor, a very substantial block of exhibits for today, more than the entire volume, and I would like to request that we go over until tomorrow. I can
8197 easily finish the last volume of the documents tomorrow, and if your Honor is agreeable, Mr. Minicus and I would like to start at 10:15. It may enable us to get away a little sooner on the week-end.

The COURT. All right.

Mr. MINICUS. May I ask one question, Mr. Gesell, in regard to your correction? I really do not understand what is meant there. You say the Philippines is not within the territory as described in the agreement. Which agreement is that?

Mr. GESELL. The license agreement.

Mr. MINICUS. Your basic agreement?

Mr. GESELL. Yes, the basic license agreement.

Mr. MINICUS. Thank you, sir.

The COURT. Adjourn Court until tomorrow at 10:15.

(At this point the trial was adjourned to Friday, November 9, 1951, at 10:15 o'clock a. m.)

8202 So that statement isn't correct.

Now, the third proposition advanced is that on our documents—a neat qualifying phrase—you do not see evidence of further exports. Mr. Minicus forgot his own exhibit, his Exhibit No. 399, which we didn't repeat, shows these exports all over the place to these different countries in different years and make most of his statements false.

Mr. MINICUS. I have just looked at that exhibit, your Honor, and it shows no such thing. It shows exports to Du Pont's territory. Your Honor has the exhibit before him.

Mr. GESELL. You have it before you now, your Honor, and you can look at it.

Now, we turn to the last section of our documents, and we have here only a handful of documents, 973 to 978, which I now offer in evidence.

(Defendant's Exhibits Nos. 973 to 978, inclusive, were received in evidence.)

Mr. GESELL. This is Roman numeral XI of Volume 7 entitled, "Ecusta Paper Corporation, The New Competitor in the Cellophane Market."

Now, your Honor, I revert back to Defendant's Exhibit 621, which appears as the last exhibit in our Volume 4, the capacity section, at page 1265, where I called your Honor's attention

8203 to the action of the Du Pont Company in 1948, where they turned down a request of their own officials to build another plant, and in turn, directed the Development Department to go out and interest one or more concerns into going into the manufacture of cellophane.

Now, arising from that action, which we have already discussed, flows the licensing and the present operations of Ecusta Paper Corporation, which are covered in this group of documents. The tangible results appear in the last exhibit, 978.

Your Honor will see the plant, which is at the very last sheet. You have a sample of the cellophane they have manufactured.

Ecusta Paper Corporation is a subsidiary of Olin Industries, Inc., and its plant is in Pisgah Forest, North Carolina.

On that picture the cellophane plant is in the foreground, and the extensive plant facilities at the back are the corporation's facilities for the manufacture of cigarette paper, they having bought Ecusta Paper Corporation, and it being the largest supplier of cigarette papers to the cigarette trade.

Over at the left you will see common facilities of those plants for raw materials. That is the result. They are in operation.

They had nine machines, and they are selling in competition

8204 with Du Pont and Sylvania and the manufacturers of other flexible wrapping materials throughout the country.

The COURT. Does the design of their plant follow that of the Richmond plant or of Sylvania's plant?

Mr. GESELL. The design follows neither, your Honor. It is a design which incorporated the very latest developments of Du Pont, a bit of which you saw at the Richmond plant. You may recall that we showed the Court the continuous process which is being developed, and that process, which is the most efficient process that anyone knows of in the world, is the basis of this plant's operation. Their plant is more modern than any Du Pont plant, and more modern, of course, than any Sylvania plant.

Now, in 973 you see the memorandum from the Development Department of the first interview with Mr. Fred Olsen of Olin. They indicate their interest and say they have been considering cellophane for about five years.

An interesting thing about this, your Honor, is that as we will develop when the proof comes along, as Du Pont sought to get someone in this business, they didn't think of Olin. They wrote substantial concerns around the country, but it was Olin who came along, and Olin who was the only one so far who indicated its willingness to take a license.

Then we have in 974 the formal contract under which Olin was licensed. The contract date is November 4, 1949.

8205 After formal recitals and definitions, which confine the licensing to moistureproof and plain cellophane, you will see under II at page 1986, the undertaking by Du Pont to impart to Olin all technical information and know-how relating to cellophane manufacture used by Du Pont in its manufacturing operations at the date of the agreement, and then its cellophane manufacturing operations prior to the expiration of four years, which means that covered by this you would have licensing of future technical information as well as all existing information.

And then over under B you will see a discussion where they are conferring on technical information between the parties, and imparting to the licensee full information as to all the different types.

Then there is an undertaking that Du Pont shall assist the licensee in the selection and acquisition of a plant site; then that Du Pont shall supply complete specifications and drawings of plant design; that it will prepare detailed engineering estimates of the cost; that it will undertake construction of a cellophane manufacturing plant on behalf of the licensee as soon as it can conveniently be done; that it will procure the materials and machinery; that it will assist Olin in the hiring and training of personnel.

That obligation, you will see at 1989, does not continue beyond six months after the start of commercial operations. It will

8206 assist in placing the machines into commercial operations, and if the licensee, Olin, can't get equipment elsewhere, it will do what it can to provide it itself. It will assist the licensee in locating and securing sources of supply and raw material.

The plant contemplated is an eight-machine plant. You will see that in 1990, having an approximate capacity of 33 million, 700 thousand pounds at a quality comparable to that being produced by Du Pont, and the casting machines to be of the most advanced design.

Then there is an obligation to assist Olin, if it wishes to expand, to the extent of an additional amount of capacity to that amount. There is no limitation of any kind on Olin as to its capacity, and of course, no reciprocal provisions here of any kind giving back to Du Pont technical information, patents, or anything else of the licensee.

Then there are provisions, it is estimated that the design and construction work for the plant will cost $18,000,000, you will see in 1991, and then from other clauses there are payments to Du Pont. That $18,000,000, of course, is a reimbursement figure for the cost of the work, and then there are payments to Du Pont provided for.

Du Pont gets 135,000 for training personnel.

It gets 400,000 for its process and know-how information.

It gets 100,000 for its patents.

8207 It gets 235,000 for designing the equipment.

It gets 75,000 for designing the building.

75,000 for the construction equipment.

40,000 for constructing the building.

And 75 for the installation of the equipment, or a total of slightly over a million dollars for its services under these various categories of supervising the design and construction of the plant, of selling its technical information, and of its patents, and of supervising the work.

It is obligated to license know-how, as I said, for four years from the date of the completion of the construction, and the licensee, Olin, is obligated to keep that information secret for a period of ten years. All of this, of course, is non-exclusive.

It has an obligation to license patents for six years from the date of the agreement. You will see that over in 1992 in the patent licensing provisions.

8208 That contract, your Honor, was mentioned, you will see—before I come to the amendment you will see at 1997 a specific provision as to their freedom to install any capacity they want, and the contract was amended so that at the time of the initial construction we put in still one additional machine over and above that originally contemplated, making it nine machines

in all; and then it was assigned by Olin to its subsidiary Ecusta Paper.

Then you will see in 997 that as early as 1949, and our proof will show, that plans for Olin are continuing and they have already asked Du Pont to assist in the selection of an additional plan site with a view to adding additional capacity. They have indicated to us that their plants have reached the neighborhood of 100 million pounds.

This contract contains no reciprocal grants to Du Pont of any kind. It results in Olin having the most modern equipment and best information that Du Pont has, use of all of Du Pont's patents with trained personnel, and our proof is going to show that these people are effective and energetic competitors with plenty of capital and plenty of drive and that they are in fact independent, strong competitors.

Mr. MINICUS. Your Honor, because the Government's discovery of the defendant on this matter has not been completed as yet, we will not reply to this subject matter at this time and will reserve our comment for rebuttal.

* * * * * *

8292 HENRY W. ERNST, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

Mr. GESELL. With your Honor's permission, as we come to each witness I would like to take 30 seconds to sort of orient the Court to the issue or issues that the witness's testimony is concerned with. In this instance Mr. Ernst is a chemical engineer, was born in Switzerland; he worked for La Cellophane and subsequently for Dupont. He is now employed at Goodyear Tire & Rubber Company. While with La Cellophane, he became completely familiar with the process and methods of manufacturing cellophane, working with Mr. Brandenberger, and he came to this country and assisted in the indoctrination of the Dupont staff and in the development of the initial cellophane project here, being the vehicle for the disclosure of much of the information. He will testify as

8293 to the nature, importance, and secret character of the technical information of the process and know how which DuPont received from La Cellophane. That goes, of course, directly to the issue that the government has raised when it has stated that there was not any secret information or any secret process, and that the agreements were a camouflage and a fiction.

8294 Direct examination by Mr. GESELL:

Q. Mr. Ernst, you are now employed by the Research Department of the Goodyear Tire & Rubber Company, are you not?

A. That is right.
Q. What is the position you hold with that company?
A. I am in charge of the New Products Development.
Q. How long have you been employed by Goodyear?
A. Sixteen years.
Q. Where were you born, Mr. Ernst?
A. I was born in Switzerland.
Q. What was the nature of your education and professional training there?
A. I went to the Zurich Institute of Technology in Zurich, Switzerland, and graduated there as a Chemical Engineer.
Q. What is the nature of that institution?
A. It is a technical school comparable with the M. I. T. As M. I. T. in the United States.
Q. Did you at one time work for La Cellophane in France?
A. I did.
Q. When did you start to work there?
A. I started to work there in 1922.
Q. How long were you employed by La Cellophane?
8295 A. Until 1924.
Q. In this period from 1922 to 1924 what was the nature of your duties and experience with La Cellophane?
A. I started out on the fifth floor of the Chemical Building, in other words, at the head of the process, and worked right through, learning the process of making cellophane for one year learning period.
Q. What do you mean you worked right through? You actually worked in the various processes yourself?
A. I worked in overalls on shifts, the day shift, the afternoon shift, and the night shift off and on.
Q. How long were you engaged in that work?
A. I was interning for just about a year.
Q. And what were you being trained for, Mr. Ernst?
A. I was trained at the time for the eventuality of opening a plant in the United States or to take over some of the duties as superintendent of the cellophane plant at Bezon.
Q. What did you do, Mr. Ernst, after that year of training?
A. After that year of training I took over the foremanship of a shift and actually ran production.
Q. And that was at La Cellophane's plant in Bezon?
A. Yes, in France.
Q. Where is Bezon?
A. Bezon is just about ten or fifteen miles out of Paris,
8296 north, I believe.
Q. How many other cellophane plants did La Cellophane have at that time?

A. Bezon was the only one.

Q. That was the only plant?

A. That was the only plant.

Q. How extensive in this period from 1922 to 1924 that we are talking about when you were there were La Cellophane's operations at Bezon?

A. We had two casting machines at Bezon in 1922 and then later on built two more.

Q. What type of cellophane were you making there?

A. We were making plain transparent cellophane.

Q. Were there other companies manufacturing cellophane in Europe at the time?

A. Not to my knowledge.

Q. Do you know when La Cellophane's plant was first built for the manufacture of cellophane?

A. The first cellophane plant was built between 1911 and 1912 and got partially into operation before the war came in 1914.

Q. Was that the same site as this?

A. That was exactly the same site.

Q. Had the plant operated during the war?

A. Yes, during the war the plant made cellophane
8297 that was used for windows in gas masks.

Q. Did you while you were in France come to know Mr. Brandenberger?

A. Dr. Brandenberger is a very good friend of mine. I knew him quite well.

Q. What was his position with La Cellophane with reference to the cellophane——

A. Dr. Brandenberger was President of the cellophane plant.

Q. When did you leave the employ of La Cellophane?

A. I left the employ of La Cellophane in March 1924.

Q. Prior to your leaving did you have any contact with any executives, employees, or representatives of the Dupont Company?

A. No.

Q. You had no contact with them before you left?

A. Well, before I left, I mean the contact that I had was with people from the Dupont Company the last few months before I left.

Q. That was what I meant.

A. That is right.

Q. Who were some of the people that you had contact with in those few months before you left?

A. Mr. J. P. Smith, Mr. R. E. Cullen, Mr. Bill Bensinger, Mr. Bob Richards, and a man by the name of Hegman.

8298 Q. Did any of these people visit the plants of La Cellophane while you were there?

A. All of these people visited the plant.

Q. What did they do when they visited the plant?

A. Mr. Smith and Mr. Cullen were apparently at the head of the delegation. Mr. Richards and Mr. Bensinger and Mr. Hegman were there to study the process from the standpoint of operating. They were actually in overalls and went through the process.

Q. What did Mr. Cullen and Mr. Smith do? Did they work at the actual machines in the process?

A. Mr. Cullen and Mr. Smith got the information together for the process.

Q. And the other three gentlemen worked on the shifts?

A. Worked actually on the shifts.

Q. Did you in any way deal directly with these people while they were there?

A. I did.

Q. What was the nature of your duties?

A. The nature of my duties was to inform and instruct and give all the information I possibly could to them in helping them to learn the process.

Q. How long did you work with some of these people? Do you recall, approximately?

A. I worked with them around two months.

8299 Q. To what extent were they given access to La Cellophane's processes and technical information?

A. They were given access to everything that the Societe de La Cellophane had from the standpoint of process as well as specifications and information regarding the whole process.

Q. When you left the employ of La Cellophane by whom were you employed?

A. I was employed by the Dupont Fibersilk Company; Dupont Cellophane Company was the same company at the time.

Q. Did that involve your coming to the United States?

A. That did.

Q. How long were you employed by Dupont?

A. I was employed by Dupont until 1932.

Q. What was the nature of your duties when you came to the United States?

A. The nature of my duties was to instruct and teach the new men in the United States that we hired to manufacture cellophane.

Q. During the time you were employed by Dupont did you have concern with any product other than cellophane?

A. I have had no concern with any other product besides cellophane. I came here entirely for this matter.

Q. At the time you came did anyone come with you from France for the purpose of assisting in this new cellophane venture here?

8300 A. I came by myself and my wife, but during the start up here or rather before the start up there were three or four Frenchmen that came along to help out for the start up.

Q. When you came here I take it you went to Buffalo where the plant was?

A. That is right.

Q. Did you bring with you any written information or machinery of any kind at the time you came?

A. I did.

Q. Will you tell us what you brought?

A. I brought my own notebooks and information and specifications for the manufacture of cellophane. I also brought over one extrusion hopper for the manufacturing of cellophane.

Q. Where had you gotten that hopper?

A. That hopper came from Bezon.

Q. Who had made it?

A. Bezon, the Engineering Department.

Q. Had the hopper actually been operated in France or was it a new one made for this purpose?

A. The hopper had been operated.

Q. By whom?

A. By the Bezon crew, I mean by the Bezon organization.

Q. You mean La Cellophane's organization at Bezon; is that what you mean?

8301 A. That is right.

Q. Had Dupont commenced the construction of the plant when you arrived?

A. Yes, the buildings were up when I arrived.

Q. Do you know what information had been given Dupont for the construction of the plant?

A. That information I did not convey. That information was given directly by the Bezon Engineering staff to the Wilmington Engineering staff.

Q. To what extent was the layout of the plant when you arrived comparable to the layout of the plant at Bezon?

A. The layout was not quite the same, because the layout had actually—some changes were made in the layout. The information I gathered at that time was that if cellophane should not be a success the plant could be turned over into a rayon plant. In other words, the foundations were put in so that either cellophane machines could be put into the building or rayon machines.

Q. Well, except for that difference to what extent was the layout comparable to the layout at La Cellophane's plant?

A. Otherwise the layout was perfectly the same.

Q. You say that shortly after you came over four other Frenchmen arrived?

A. That is right.

8302 Q. What kind of people were they—I mean in terms of their duties and experience?

A. They were, as we should say, the cream of the crop of the operating personnel from a labor standpoint.

Q. What were they trained in doing?

A. They were trained in all different operations. They were trained in the chemical operations as well as the operations on the casting machine, drier, and finishing area.

Q. Did those men stay here or did they go back to France?

A. They went back to France.

Q. How long were they here?

A. They were here over a period of three to four months. I don't exactly know.

Q. I believe you said you also brought with you some operating notes. Will you tell us what those were?

A. These operating notes that I have been referring to were entirely specifications such as temperatures of bath, such as concentrations of viscose from the standpoint of cellulose and caustic soda, and they were information for the start of a casting machine from the start to finish, from the hopper to the winder.

Q. Where had you gotten the information in those notes?

A. I had gotten all this information at Bezon.

Q. Did Bezon actually have any operating manuals as they are known today in the chemical business for this process?

8303 A. No.

Q. How long after you arrived did the first cellophane machine at Buffalo get running?

A. I arrived in March and the first machine started in Buffalo in April, April 3rd or 4th.

Q. Will you tell us what assistance, if any, you and the four Frenchmen you have mentioned who came over gave in getting the Buffalo operation under way at that time?

A. Well, it would have been in my estimation impossible to start without the crew that I brought over from France. We had hired about 25 or 30 people in Buffalo, and these men were all trained by the crew I got over from France, teaching them how to thread the film through the machine, teaching them how to operate the machine. We had no man here that knew what a hopper ever looked like. We had nobody that could operate the hopper or had the rudiments of starting a casting machine.

Q. What did you do with the hopper you brought over?

A. The hopper was actually handled just like a baby. It had to be babied because it was a most intricate piece of equipment.

Q. What did you do with it? Was it installed in the process or was it copied here for subsequent use or what happened?

A. No, it was installed in the process, because it is the hop-
8304 per that made the first sheet of cellophane that was made in the United States.

Q. Was there anyone else over from France here at the time the machines started up in addition to yourself and the four technicians you mentioned?

A. Yes, Dr. Brandenberger himself, the inventor of cellophane, was here.

Q. Was he at the plant?

A. He was in the plant.

Q. What did he do in connection with the start up of the process?

A. He did give some additional instructions as to what should be done and he made some slight changes which the Engineering Department heeded.

Q. How long did he stay?

A. If I remember well, he stayed just one month.

Q. How many employees did you and your associates train for this operation?

A. Well, I started out with around 60, but out of the 60 there were very few of them that were able to stand the gaff, or, in other words, were able to make good cellophane operators. It is a very, as I pointed out, intricate job to manipulate a hopper, and I remember at that time there were only approximately two men out of those that were able to do that.

Q. How long does it take to train a man to operate a
8305 hopper?

A. It took from eight months to a year for a man to actually become a hopper operator.

Q. At the time your operations got under way at Buffalo did you experience any difficulties with respect to the film that was turned out in the process?

A. Yes, we were in difficulty over our ears.

Q. Will you explain by that what you mean, "difficulty over your ears"? You don't mean in cellophane, I suppose?

A. In cellophane, too. We had an eternal fire burning in the back of the plant which took the first two or three months—part of the first two or three months production.

Q. What do you mean you had an eternal fire burning which took the production?

A. The waste from the actual manufacturing, starting the machine and getting it out of the other end, out of the drier.

Q. What were some of the difficulties experienced with the film or material that made it waste? What was wrong with it?

A. Some of the difficulties were the viscose in the first place, the viscose process was—before that period of time rayon had been made in the United States. The viscose manufactured for rayon was not or could not be used at the time for making cellophane.

8306 Q. What difficulties did that lead to in the material?

A. It meant that we had to underride and override viscose trying to make cellophane out of that. It meant that the concentrations or the ratio between cellulose and caustic soda had to be changed.

8307 Q. What other difficulty did you have with this material that caused you to put it on the fire?

A. Well, it was absolutely waste. It couldn't—we couldn't do anything else with it.

Q. Was the cellophane made at that time made in sheets or rolls or in what form?

A. It was made in roll form and then cut into sheets.

Q. And what kind of cellophane was made? Was it plain or moisture proof or what type?

A. It was a plain, transparent cellophane. Pure cellulose hydrate.

Q. And how many shifts did you run?

A. We ran three shifts.

Q. Why was that?

A. Cellophane is a continuous process, and it can not be interrupted. It is similar in that respect to other processes where a solution has to age over a period of time involving more than 24 hours.

Q. So you had to keep running all the time?

A. We had to keep running constantly.

Q. Did breakdowns occur in that continuous process in the earlier stages?

A. Breakdowns occurred very frequently.

Q. What were some of the factors that caused those breakdowns?

8308 A. Some of the factors were temperature differences, difference in ripening time of the alkali cellulose or viscose, and delays of the casting machines, taking away the proper amount of viscose, so that the oncoming viscose could be used up. Viscose is a compound which ripens as it is made. It continuously goes until it gets to be a hundred or a hundred and five hours old, and then it jells.

Q. While you were in France, at La Cellophane's plant, did La Cellophane take any precautions to maintain the secrecy of its information as to these processes and developments?

A. Yes; the cellophane plant in France had a fence around it and a gatehouse, so anybody that did not have any business in the cellophane plant was not let in. It was a system of passes, just like it was at Dupont.

Q. And at that time, back in 1922 and 1923, while you were there, to your knowledge was information available from anyone other than La Cellophane as to how to make cellophane on a commercial basis?

A. No.

Q. Now I want for a few moments, Mr. Ernst, to discuss some of the stages of the cellophane manufacturing process as it was in the first year in Dupont's operations at Buffalo, from the point of view of some of the more significant types of information which were disclosed to Dupont by La Cellophane at that time;
8309 and first turning to the viscose preparation and ripening, which is the first part of the process, I believe you said that it was not possible to make cellophane with viscose as used in rayon manufacture; is that correct?

A. The index and viscosities and ripening used for cellophane viscose are not the same as rayon viscose.

Q. Will you tell us a little more about this? What do you mean by the cellulose content?

A. The cellulose content is the amount of cellulose in the composition. The amount of cellulose in the composition can be varied to a certain degree.

Q. And the amount, as I understand you, the amount of cellulose required to cast cellophane in a viscose preparation differed from the amount required to extrude rayon?

A. That's right.

Q. And then you referred to the index or ripeness index. What do you mean by that?

A. The ripening index is a test whereby viscose is put in a salt solution and shaken until fine hairs appear in the solution. Depending on the ripening time, it takes either a strong or weaker solution of sodium chloride to bring out the coagulation point of the viscose.

Q. Then as I understand your testimony on that, the ripening index or coagulating point was different for viscose used to cast cellophane than in the case of rayon?

A. It definitely was.

8310 Q. And then you referred to viscosity or flow. What do you mean by that?

A. The viscosity is the fluidity of the solution. The higher viscosity the viscose will run through a tube with a slight opening at the bottom slower than a low viscosity viscose.

Q. How did the viscosity for cellophane manufacture compare with the viscosity for rayon manufacture?

A. That also was different.

Q. What did the French disclose to Dupont, Mr. Ernst, with respect to these three factors, the collulose content, the ripening index, and viscosity?

A. All that information was disclosed to the Dupont Company.

Q. What do you mean by that information?

A. The information on these three, viscosity and index and concentration of cellulose.

Q. Was that information publicly available anywhere, to your knowledge?

A. Not that particular information. Viscose had been made before.

Q. But these particular measurements were not known?

A. No.

Q. Can you tell us what the tolerance or tolerances are
8311 with respect to these factors in the viscose? How big are the variables in order to manufacture satisfactory cellophane?

A. I do not remember those tolerances, but from a concentration standpoint it may vary as much as 1% of the cellulose in the viscose.

Q. How had La Cellophane learned what these factors were as to content and ripeness and viscosity?

A. That was entirely done by trial and error.

Q. In your opinion how long would it have taken Dupont by trial and error to have learned the proper factors for cellophane casting?

A. It is quite hard to put a time limit on that, but it would have been a long time. It might have been four or five years to find out.

Q. Can you tell us a little more about the ripening feature in this viscose preparation and ripening part of the process? What are the particular factors that have to be controlled, if any, at the ripening stage?

A. Well, that factor starts already in steeping, where the steeping caustic temperature has to be controlled, and it continues on through shredding, where the shredder temperatures have to be controlled, down to the xanthating, or the part where the temperature has to be controlled where actual alkali cellulose is turned into xanthate. And this control goes on. In particular is

8312 it important to control the alkali cellulose ripening room temperature. There is another phase that influences the end product, which is viscose or cellophane.

Q. What did the French disclose with respect to the temperature and other features at that stage?

A. All that information was disclosed by the French.

Q. I want to come for a moment to the hopper, which I believe you said earlier in your testimony had to be handled like a baby. What is the hopper?

A. The hopper is the equipment with which viscose was extruded into the sulphuric acid bath.

Q. What would you say was its significance in the manufacture of cellophane by this Brandenberger process?

A. It was all significant, in that I can think of no other way of making cellophane.

Q. Who had developed the design of the hopper, if you know?

A. I understand that it was Dr. Brandenberger and some of his engineering associates.

Q. As I recall the hopper at the time that the Court and counsel went down to the plant to look at the process as it is today, the cellophane comes out between two narrow lips which are called hopper lips; is that correct?

A. That's right.

Q. How wide were the lips at the time this first hopper machine was brought over?

8313 A. The lips were approximately 78 inches to 80 inches wide.

Q. What were some of the problems that occurred in connection with the control of the opening between those lips?

A. That was very difficult work, to keep these lips straight, so that they would extrude a film with even gauge.

Q. How wide was the opening between the lips?

A. The opening was about ten times the width or the thickness of the film.

Q. And was the opening the same across the entire width of the hopper?

A. It was the same to start out with, but there were adjustments at the edge of the hopper where you have three dimensions; you have got the edge, the front, and the back. To take care of that, special adjustments were installed to pull down or open up, but in general it pulled down the slot to make it thinner.

Q. What were the lips made of? What material?

A. The lips were made of pure nickel.

Q. Was there any particular reason why they were made of that metal?

A. That was about, at the time, the cheapest noncorrosive metal that could be found.

Q. Now you said it would take, as I recall, upwards
8314 of a year to train an operator. What were some of the problems that the operator had to deal with in the handling of this precise machine?

A. An operator of a hopper had to be really a fine mechanic and had to have feeling for mechanics in general. The adjusting wheels, to adjust the gauge, were very, very sensitive, and one wheel could not be adjusted at one time; it always took two wheels on the side to be loosened up, to tighten up the middle wheel; and the results of adjustment that was not made right would show up on the film coming out of Number 1 tank.

Q. Suppose it was decided to change the adjustment of the lips to get a different gauge or type of cellophane at that time,—what other factors in the operation of the hopper did the operator have to control?

A. When the gauge had to be changed, then the hopper operator had to call for extra help, because one operator—there were five wheels on the hopper—one operator could not handle the opening or closing of the lip at one time.

Q. After the lip was changed, was it necessary to adjust any other factors in order to manufacture cellophane?

A. It was.

Q. What were they?

A. When the lip was changed and, say, for example, a heavier film was made, that called for changing the bath,
7315 the active bath, in the casting machine, to take care of the additional viscose being coagulated, dehydrated, desulphured, bleached, and glycerinized and dried.

Q. Was there anything else that had to be adjusted?

A. Well, the gauge in a case like that had to be adjusted all over again, and that was the hopper operator's duty, seeing that no small bands appeared in the film going over the first transfer roll.

Q. Coming from the hopper, the next stage in the process is the coagulating bath, is it not?

A. That's right.

Q. What did the French disclose with respect to the bath?

A. All the information on the coagulating bath for thin and heavy film, the compositions, as well as the temperatures of the bath, were disclosed by the French to the Dupont organization.

Q. Why were these temperatures and compositions of the bath important?

A. The temperatures in Number 1 tank are important because it affects, in the first place, the width of the film. It may to another extent cause bubbles, or rather gas bubbles, at high temperatures.

If the temperature of the bath should be increased, it may cause bubbles in the film, making it absolutely unusable.

8316 Q. After the first bath, did the French make any disclosures with respect to the number, order, and size of the subsequent baths?

A. All that was disclosed in the construction of the machine.

Q. How many baths were there?

A. If my memory is correct, there were 15.

Q. What information was given as to the sequence of the baths, if any?

A. The sequence of the baths is established. It can not be changed. And it had to be run pretty well the way the machine was constructed, to get the end results of a sheet of cellophane at the windup.

Q. What if anything did the French disclose with respect to the sequence and composition of those baths?

A. All that was disclosed too. I had that in my notes as well as the engineering department had that in Wilmington.

Q. Was the size of the bath of any consequence in this connection?

A. The size of the bath is of consequence in relation to the speed of the machine,—the size of the tank, would limit the speed of the machine. After all, there is a reaction time necessary to coagulate and dehydrate and to desulphur. There is also a time limit on glycerin baths to take——

Q. Did the French make any disclosures as to the size of the baths?

8317 A. All that was disclosed.

Q. What if anything did the French disclose with respect to the temperatures of the baths and the flow of the baths?

A. Those informations and specifications were also disclosed, what precisely do you have in mind?

A. The exact temperature as well as the exact concentration of the reactive bath.

Q. The next thing we come to in the process, I guess, is the dryer, is it not?

A. That's right.

Q. Did the French make any disclosures with respect to the dryer?

A. Yes, they did.

Q. What did they disclose with respect to the dryer?

A. The dryer is a piece of equipment that in my estimation is the only dryer that can keep cellophane transparent while drying,—get it transparent,—because the film is held constantly on rolls and is never let to hang free. The difference between a

heavy dryer and festooner or some paper dryer is that the film is held at all times.

Q. Why is it important to hold the film?

A. The importance of that is the transparency of the
8318 finished product. If a film is spread on a glass plate from viscose and coagulated in sulphuric acid or ammonium sulfate and is taken off the plate after coagulation and hung up to dry, it will not be transparent. In other words, it has to be held to become transparent and stay transparent.

Q. What did the French disclose with respect to how it should be held?

A. They disclosed a dryer with actual heating rolls and floating rolls, which enabled the film to be held to the rolls at all times.

Q. During the drying process does cellophane expand or shrink?

A. During the drying process, cellophane shrinks.

Q. What if anything does the construction and operation of the dryer have to do with the control of shrinkage?

A. There is a very important point. The film is held to the rolls, preventing maximum shrinkage of the film.

Q. Did the French make any disclosures with respect to that aspect of the drying operation?

A. They did.

Q. What were they?

A. The patent disclosed part of it.

Q. And what in addition to the patent did the French disclose?

A. Well, the temperature of the dryer was disclosed
8319 by the French as well as the composition of the rolls that were used for bottom rolls and floating rolls.

Q. Was there any way in the dryer of controlling the speed at which the film went?

A. Yes, there was. In fact, the film,—sometimes orders were received for film—regularly the film comes out at about 40 inches—it did at that time,—and sometimes orders were received to make film, say, 36 inches or 35 inches. To do that without changing anything to the extrusion equipment, we used to shred out the number of rolls and draw the film across some of the rolls, to actually let the film shrink to the point where we wanted it, say 35 inches or 36 inches.

Q. And the techniques for that you say were disclosed by the French?

A. They were.

Q. Mr. Ernst, have you recently, at our suggestion, examined the Smith-Cullen report, Defendant's Exhibit 742, in this case?

A. I have.

Q. Are you familiar with its contents?

A. I am very familiar with it.

Q. To what extent was this report used at the time of the Dupont's initial construction and operation of the cellophane plant at Buffalo?

A. This was used extensively. In fact, it was used
8320 to the point where it could almost be called standard practice.

Q. Are these factors that you have been discussing as well as other factors set forth in the report?

A. Right.

Q. Mr. Ernst, to what extent, in your opinion, was the technical information disclosed in the manner you have described by La Cellophane to Dupont necessary for the commercial manufacture of cellophane at that time?

A. It was absolutely necessary.

Q. Will you explain why you say that?

A. The reason is that although viscose was known at the time, and rayon was made at the time, cellophane differed a great deal from rayon. Cellophane was a sheet. Rayon was a thread. Extrusion equipment in 1924 was unavailable here, to my knowledge, and it was absolutely necessary that we had the extrusion equipment furnished us by La Cellophane. I can not see how it would have been possible to start a plant with the help of these Frenchmen and the information in the Smith-Cullen report and my coming to this country to start it.

8321 Q. Well, now, while you were here did Dupont to your knowledge take any steps to keep the information it had received from the French secret and confidential?

A. I believe so.

Q. What steps do you recall their taking?

A. They had the same arrangement that we had at Bezon with a fence around the plant and a gate house, and they were protecting themselves from people that had no business getting into the plant from getting in.

Q. Were strangers permitted to enter the plant?

A. No.

Q. Did you yourself have to make any contracts or were you put under bond or was anything of that kind done to preserve the secrecy?

A. I had no contract with the company, but I was under bond.

Q. How much were you bonded for?

A. I believe it was $100,000 at the time.

Q. Going back to France, Mr. Ernst, do you know a Mr. Bleibler or did you know a Mr. Bleibler?

A. Yes, I knew him.

Q. Who was he?

A. Mr. Bleibler was the Chief Engineer of the Societe de La Cellophane.

Q. Did you know Mr. Ray?

8322 A. Yes, I did.

Q. Who was he?

A. Mr. Ray was Dr. Brandenberger's secretary.

Q. When you first came to La Cellophane's plant and worked there were they both employed there?

A. They were both there.

Q. To what extent were they familiar with the processes and secret information there?

A. Mr. Bleibler was quite familiar with the process. Mr. Ray was an office man who was a secretary, although he was familiar with the process. He had seen it and he knew the administrative end of running a cellophane plant very well.

Q. At the time you left La Cellophane were those men still in its employ?

A. I believe so.

Q. Do you recall at any later date having heard whether they remained in the employ of the company?

A. No. I had information that they went—that they left Dr. Brandenberger and were figuring on building a plant in Belgium some place.

Q. Where did you get that information?

A. I got that information from—I don't exactly know where I have the information from along that line, except that I know that I have heard it.

Q. Well, now, while you were at Dupont did you assist

8323 Dupont in any way in connection with setting up additional plants or operations at points other than Buffalo?

A. I did. In 1931 it was apparently decided to start a plant in Showinigan Falls, Canada, and at that time I was delegated to train the Canadian technical personnel for that job.

Q. What company was to operate that plant?

A. The Canadian Industries, Limited.

Q. To what extent did you give the training and make the disclosures as to the process?

A. It was almost a repeat from the first time I started the plant in 1924. I had this technical personnel in Buffalo for a number of weeks, some of them doing the same thing, going through the operation in overalls, learning it from start to finish, and some of the others more from a commercial angle.

Q. Did you go to Canada?

A. I went to Canada and stayed for only one year and saw the start up and supervised the start up of that plant in Showinigan Falls.

Mr. GESELL. Your witness.

Mr. MINICUS. May we have the mid-morning recess, your Honor?

The COURT. Yes. Recess for ten minutes.

(At this point a brief recess was taken.)

8324 Cross-examination by Mr. FITZPATRICK:

Q. Mr. Ernst, could you tell us when you were born?

A. I was born in May 20, 1899.

Q. Could you tell us, Mr. Ernst, when you graduated from the University of Zurich?

A. I graduated in 1921.

Q. 1921?

A. That is right.

Q. When did you go to work for La Cellophane, Mr. Ernst?

A. In 1922.

Q. How long was that after you had graduated from the University of Zurich?

A. Just about three or four months.

Q. What was your experience in that three or four months, Mr. Ernst?

A. I did some work in an aluminum factory in Switzerland.

Q. You did nothing in the viscose chemistry field?

A. No.

Q. You started in what month in 1922 with La Cellophane?

A. It was in May or June, I am pretty sure.

Q. May or June of 1922?

8325 A. Yes.

Q. And it took you one year to go through their training course?

A. Just about.

Q. In other words, Mr. Ernst, you went through a student engineer training course similar to the courses given by General Electric and Westinghouse and the other large corporations in this country today?

A. It is a little bit different in France. We went through the mill. We went from the start in overalls.

Q. But it took you one year?

A. Just about.

Q. At the end of that one year you had then become an expert in the manufacture of cellophane?

A. I was running a shift after one year, in charge of a shift.

Q. Now, when you went to Dupont, Mr. Ernst, did your transfer to the Dupont Company come as a result of any contract between La Cellophane and Dupont or was it a personal contact between yourself and Dupont?

A. No. Dr. Brandenberger asked me if I wanted to go to the United States or stay in France, and I told him I wanted to go to the United States—I mean for this purpose.

Q. I see. Mr. Ernst, in 1923, on January 5th, you had been in the manufacture of cellophane or in any way connected
8326 with viscose chemistry for approximately nine months, had you not?

A. That is right.

Q. You had never been in the rayon business?

A. No.

Q. May I ask you, then, upon what you base your opinion that the rayon industries did not have the necessary information to manufacture viscose for cellophane?

A. I did not make that claim that they did not have the experience of making viscose. I said the type of viscose that was made for cellophane was not the same type that was made for rayon.

Q. That is what I am getting at, Mr. Ernst. Do you have any way of knowing whether or not the rayon manufacturers could have made the type of viscose that is used in cellophane?

A. No.

Q. Is the over-all process for making viscose in the rayon industry the same as the over-all process for making viscose in the cellophane industry?

A. It is.

Q. In other words, the only difference, as I understand it, Mr. Ernst, is in certain variables in the process?

A. That is right.

Q. Certain length of aging or certain concentrations
8327 of various fluids?

A. Yes.

Q. Now, Mr. Ernst, you testified, as I recall your testimony, that there was no cellophane being manufactured in 1923 by anyone in the world except La Cellophane?

A. To my knowledge, yes.

Q. To your knowledge?

A. Yes.

Q. Now, do you, know, Mr. Ernst, whether or not cellophane had ever been manufactured by anyone else before that day?

A. Besides anyone else, but who?

Q. Besides La Cellophane?
A. No, I don't know.
Q. You don't know of any?
A. No.
Q. Have you ever heard of the Manchester Viscose Company of England?
A. No.
Q. You never heard of an inventor by the name of Chorley?
A. No.
Q. You have no knowledge of a possibility that Mr. Chorley was manufacturing cellophane in 1898?
A. No.
8328 Q. On a commercial scale in England?
A. No.
Q. In other words, Mr. Ernst, you entered the cellophane field and viscose field in 1922?
A. Yes.
Q. Your history of viscose starts right there?
A. Yes.
Q. Now, Mr. Ernst, you testified that in your opinion it would take Dupont—that it would have taken the Dupont Company perhaps four or five years of trial and error to manufacture cellophane. Did you know that the Wolff Company in Germany was manufacturing cellophane in 1924?
A. No, I did not.
Q. Now, Mr. Ernst, you have testified, as I understand it, that the defendant's exhibit 742, which is known as the Cullen report, contained certain information which was essential to the manufacture of cellophane?
A. That is right.
Q. First of all, I would like you, sir, to answer of what nature was this information? We have heard the term often used "a secret process." Would you, sir, say that the process was secret?
A. As to the regard of those informations it was secret from that standpoint.
Q. As to the regard of what information?
8329 A. The information contained in the Smith and Cullen report. It was not published.
Q. The information in the Smith and Cullen report in toto was secret?
A. Yes.
Q. I am going to ask you again, this whole 149 pages contained secret information?
A. I don't know if it is all secret information, but it is information that was transferred from La Cellophane at Bezon to the Dupont Company.

Q. Then the only thing to which you have testified is that the information in this report, the Cullen report, was the information which was transferred from La Cellophane to Dupont?

A. This is information with which we made cellophane.

Q. Was that information secret?

A. It was secret between, I suppose—it was secret inasmuch as it has never been published, as far as I know.

Q. As far as you know?

A. That is right.

Q. But you are not willing to testify, then, that the information in that report was secret? Let me put the question this way: If it had been published you would retract your statement that it was secret?

A. Well, anything published is not secret.

8330 Q. What about something patented, Mr. Ernst? Is that secret?

A. No.

Q. Is anything in this report, any of the material contained in this report, patented prior to the time of the report or subsequent to the time of the report?

A. I don't know.

Q. You don't know?

A. No.

Q. I am more or less at a loss at this point, Mr. Ernst, to determine just what you are testifying to. You say to the best of your knowledge it had not been published and then you turn around and say you don't know whether it was patented.

A. That report, if you are talking about, is not patented.

Q. Not the report, no, sir, but any possible improvements or new developments that were contained in the report of an inventive nature?

A. The original ideas of the process have been patented——

Q. Then it is not the original ideas——

Mr. GESELL. Let him finish his answer. Don't interrupt him.

A. (Continuing.) The original ideas of that process, of which this Cullen report and Smith report is a copy, has been

8331 patented.

By Mr. FITZPATRICK.

Q. It has been patented?

A. It has been patented. Not that report nor the information in there.

Q. None of the information in the report?

A. Has not been patented.

Q. None of this information has been patented?

A. The information, as I said—I apparently don't make myself very clear. The information in the report—this is a study of a process which has been patented.

Q. The process has been patented?

A. The process, the machinery, the process.

Q. The process, the machines, and this is merely the technological know-how that goes with the process; is that not true, Mr. Ernst?

A. That is right.

Q. There was no secret process, Mr. Ernst?

A. Well, the process was secret to the extent that it was secret between—it was not made public; it was not published.

Q. But it was patented?

A. Only part was patented.

Q. What part was patented, Mr. Ernst?

A. The machine part was patented, while the information
8332 under the manufacturing was not and the information on specification was not patented or was not known or was not published.

Q. You say the machines were patented. Was the method itself patented?

A. The method of making, yes.

Q. Was this method of making patented?

A. That is not a method of making. That is specification.

Q. In other words, this is not a method, it is not a process, it is not a secret invention; it is just the technological specifications which fit into those various categories, is it not?

A. No, that is not so. It is that report together with the information that we brought over that made it possible to make cellophane.

Q. Now, Mr. Ernst, I understand you to say, then, that it was impossible to manufacture cellophane with the information disclosed in the United States Letters Patent issued to Mr. Brandenberger.

Mr. GESELL. As of what date, if your Honor please?

Mr. FITZPATRICK. As of any date.

The WITNESS. Would you repeat that question.

8333 By Mr. FITZPATRICK.

Q. I understand you to say, Mr. Ernst, that it was impossible to manufacture cellophane with the information disclosed in the letters patent issued to Mr. Brandenberger?

A. That on a scale is true. It is impossible—it was impossible with the information disclosed in the patents. It was not possible to make cellophane.

Q. There was not sufficient disclosure in the patent?

A. That's right.

Q. Mr. Ernst, could you tell us in your opinion how long this information has stayed secret?

A. I have no idea on that score, because I never was an officer of the company, of the Dupont Company.

Q. In other words, you feel that it was secret in 1923?

A. 1923 and 1924, I know.

Q. Now, Mr. Ernst, how much of this report, of the material contained in this report, is found in the patented material?

A. To my knowledge, very little.

Q. Very little?

A. Yes. From the standpoint of engineering and mechanics.

Q. Engineering and mechanics, Mr. Ernst? In other words, this report contains engineering data, mechanical data?

A. It does to some extent.

Q. To what extent?

8334 A. To the extent that you can make cellophane with the information that you have in that report.

Q. Is there anything, Mr. Ernst, in this report which is not of a pure mechanical or engineering nature?

A. Yes, there is chemistry involved in it.

Q. Chemistry, I fit within the definition of engineering. Is there anything which reaches the level of invention?

A. The level of what?

Q. Of invention.

A. In the report?

Q. In the report.

A. Or the process?

Q. You distinguished the report from the process then again, that the report is not the process? The process was patented; is that true, Mr. Ernst?

A. That's right.

Q. Is there anything in the report then which might be considered of the dignity of invention?

A. I don't quite get the— —

Q. Let me put it this way, Mr. Ernst. I am trying to draw a line, and I think you have drawn it for me, between the process itself and the engineering data that goes along with the process. Now as I understand your testimony, you have said that the process itself was patented and this report was merely an amplification of that process with the detailed engineering specifica-

8335 tions that could be used with the process. Is that true?

A. The process has been patented—the process and the mechanics or the engineering data has been patented, but not the specifications.

Q. Not the specifications. Now by specifications, Mr. Ernst, do you mean more or less a cookbook procedure for the process?

A. Right.

Q. This is a cookbook procedure for the process of making cellophane?

A. Well, I wouldn't call it a cookbook procedure. There is more to it than that. In the first place, I regard it as an excellent report of two technical people.

Q. I am not, sir, attempting to reflect upon the ability or the style of writing or anything else in the report. I just want to characterize the information contained in the report. Now is it fair to say that this is more or less a step-by-step operating manual or a procedural text of how you would use the cellophane process which had been already patented?

A. It is something similar.

Q. Now, Mr. Ernst, let us start off with what has been patented; and I ask you, was cellophane ever patented?

A. The trade name you are referring to?

Q. No, the product itself.

8336 A. I don't know.

Q. Did Mr. Brandenberger obtain process patents on how to manufacture cellophane?

A. Yes.

Q. Have you ever seen this Brandenberger patent, sir?

A. Yes, I have.

Q. Now then, Mr. Ernst,——

Mr. GESELL. Now wait a minute. Could I see it, so I know what you are talking about?

Mr. FITZPATRICK. Patent #1,548,864.

The WITNESS. What is the date on that patent, if I may ask?

Mr. FITZPATRICK. Filed June 19, 1923, patented August 11, 1925.

By Mr. FITZPATRICK.

Q. Now I would like to read from the second paragraph of the first page of this patent and ask you whether or not the statement contained therein is true. "The object of this invention is to provide a process of manufacturing in continuous manner cellulose strips, films and the like, derived from acqueous solutions of sodium cellulose xanthate, generally termed viscose."

A. Right.

Q. Now, with the information contained in this patent,

8337 Mr. Ernst, is the casting process which was subsequently described in the Cullen report fully disclosed?

Mr. GESELL. I object, your Honor. That is an improper question. This patent did not issue until 1925.

Mr. FITZPATRICK. I will change subsequently to previously. It makes no difference.

The COURT. Still I think you are asking the witness to interpret the patent, which is a matter of law for the Court.

Mr. FITZPATRICK. All right, sir.

By Mr. FITZPATRICK.

Q. Mr. Ernst, when you testified about the viscose preparation you said that there were three critical values contained in the Smith-Cullen report which were unknown to viscose manufacture before. Is that not true?

A. I did not say they were unknown. I said they were different.

Q. They were different?

A. That's right.

Q. But the method of determining them and everything else was well known; it was just the specific limits of those values that were different?

A. That's right.

Q. As far as the cellulose content is concerned,—I believe that was the first you discussed, Mr. Ernst,—could you tell me
8338 what the cellulose content preferable for cellophane manufacture was?

A. I don't remember.

Q. Could you tell me how it differed from the rayon cellulose content?

A. I believe that the concentration was increased from the standpoint of cellulose.

Q. In cellophane?

A. In cellophane.

Q. Could you tell me how much it was increased?

A. I don't remember.

Q. Relatively speaking? Was it very much?

A. I don't remember.

Q. You have no idea? You just know it was different?

A. It was different. It was higher.

Q. If the ratio of sodium hydroxide to cellulose were .80 to .84 for cellophane, as stated here in the Smith-Cullen report, could you give me a comparable ratio for rayon?

A. No, I don't remember. I have never made rayon.

Q. You have never made rayon? You don't know how different it was? Then how do you know it was, Mr. Ernst?

A. It was different, because I saw rayon reports and I saw rayon viscose made.

Q. Does the sodium hydroxide-cellulose ratio of .87 sound familiar in rayon?

A. I don't remember.

8339 Q. Now then, you touched on the ripening index, Mr. Ernst. First let us take the viscosity. The viscosity was different. Will you give me again your definition of viscosity?

A. Well, viscosity,—I gave a definition of viscosity, in that at a higher viscosity this viscose does not run through a specified tube of a certain diameter with a small hole in it as fast as a low viscosity viscose.

Q. In other words, viscosity is more or less a measure of the internal friction of the molecules of the fluid?

A. That's right.

Q. The particles of the fluid?

A. Right.

Q. If you want a thickly running fluid, you have a high viscosity, and if you want a freely running fluid you have a low viscosity; is that right?

A. That's right.

Q. Is it not true that the only reason viscosity is critical is because if the viscosity becomes too high it will not flow properly through the casting operation?

A. That's right.

Q. In other words, the problem is to get as high a viscosity as possible, still letting it flow through the casting machine?

A. No, that is not the only reason. There are other
8340 factors affecting that. That is, the ripening index.

Q. The ripening index affects the viscosity?

A. The ripening index of the viscose, which is already affected by the ripening index of the alkali cellulose.

Q. You speak of the ripening index now, Mr. Ernst. Would you explain again just what you mean by ripening index.

A. Of the alkali cellulose or of the viscose?

Q. Of the viscose, at the casting machine.

A. Well, the ripening of viscose can very easily be compared with the ripening of anything else, such as an apple. It keeps on ripening at room temperature until it gets to the point where it coagulates, and then it is useless. The greener it is, the more fluid it is and the less ripe it is. That is what I understood at the time of viscose.

Q. In other words, the index is a test of the ripeness of the viscose?

A. That's right.

Q. Is that same index test used in the manufacture of rayon?

A. Possibly. There is more than one way of determining indices. There is the Baum method, and there is the salt method.

Q. Well, regardless of the type of index test used, an index of ripening is measured in rayon manufacturing?

A. I don't know.

8341 Q. Now with varying indices you will obtain varying resulting products; is that true?

A. That's right.

Q. The characteristics of the film will be in large part determined by the proper choice of an index for casting?

A. That's right.

Q. Now then, Mr. Ernst, is the index of the viscose at the casting machine a critical factor in the manufacture of plain cellophane?

A. It was.

Q. It was at that time?

A. As far as I remember, it was.

Q. Do you remember the range of indices that might be used at that point?

A. I don't remember. It has been 17 years ago.

Q. But there was a critical range of indexes which——

A. There was a critical range of indexes, in between certain limits. It was critical in between certain limits.

Q. In between certain limits. And without that range you could not manufactu plain cellophane?

A. I don't say that. I have never tried it.

Q. You never tried it?

A. I never tried it.

Q. And you never made rayon, Mr. Ernst?

A. I never made rayon. That is what I said before.

8342 Q. And you have no idea of what the indices used in the preparation of rayon viscose are?

A. I do not.

Q. In this Smith-Cullen report I take it then that the critical range of these indices is set forth; is that not true?

A. That's right.

Q. I show you Page 65 of that report, Mr. Ernst, and ask you if the index set forth there is in any way critical or was meant to be critical. Would you read that to the Court, Mr. Ernst? The first sentence of that paragraph?

A. "The clarity of cellophane depends upon viscose having an index of below 1.5, cellulose content of 6.3 to 6.5."

Q. That is enough, Mr. Ernst.

A. This is all known here. "Freedom from lead, iron, etc., in bleach and acid baths; thorough washing of the film to prevent

deposit of sodium sulfate; the use of clean water plentifully at proper wash points; the use of clean glue solutions properly applied."

Q. That gave an index of 1.5 which was according to this report necessary to have a clear cellophane; is that your interpretation of it?

A. At that time. The thing is that——

Q. At that time?

A. The thing is that all processes have changed in the
8343 meantime.

Q. That is true.

A. All processes have changed and things are not run—I am talking about 1924, and I am not talking about anything else.

Q. Right.

A. Therefore I do not claim to know anything about what rayon or cellophane is run now, what index.

Q. Now, Mr. Ernst, this was Mr. Cullen's statement, and would we take it that if an index of over 1.5 were to be used, that cellophane would not be clear?

A. I don't know.

Q. Well now Mr. Ernst, you have testified that you are completely familiar with the material in this report. Now is this a true statement or was it a true statement at the time or was it not?

A. I think it was a true statement at that time.

Q. I show you Page 68 of the report, wherein at the bottom of the page the range of viscose ripening indices which were actually run on the casting machine at Bezons is set forth, and ask you whether or not they all appear to be below 1.5.

A. What is the question?

Q. We have just had your testimony to the effect that Mr. Cullen's statement that an index of 1.5 was necessary for a clear cellophane was true, and I ask you now whether or not the
8344 actual indices used in the Bezons plant showed that they all were below 1.5.

A. It does not show so here.

Q. What was the average there, Mr. Ernst?

A. It says 1.8.

Q. 1.8? What was the maximum, Mr. Ernst?

A. 4.4.

Q. 4.4. Well now, if this index was so critical, Mr. Ernst, could you tell me wherein this report defines a critical index necessary for the casting of cellophane?

Mr. GESELL. Your Honor, I must ask that the witness be given the full report. He has taken two pages from two different sections of the report, concerning two subjects, and is handing sheets to the witness and not showing him the whole report.

Mr. MINICUS. The witness testified, your Honor, that he is familiar thoroughly with the entire report.

Mr. FITZPATRICK. Anything you want I will be glad to give you. This is the complete section on indexes and viscosity, and this is Pages 65, 67 and 68.

Mr. GESELL. Now you have to give him what Page 65 is in. You have to show him the report so he can see what part of it.

The COURT. I will give the witness time to study it. We will recess for luncheon until two o'clock.

8345 (At this point recess was taken until two o'clock the same day.)

8346 2 O'CLOCK, P. M., THE SAME DAY.

PRESENT: As before noted.

HENRY W. ERNST (Resumed).

CROSS-EXAMINATION (Cont.)

Mr. FITZPATRICK. I wonder if I may ask the Reporter to read back the last question that was in the transcript, your Honor.

The COURT. Yes.

(The following question was read by the Reporter:)

"Question: 4.4 Well now, if this index was so critical, Mr. Ernst, could you tell me wherein this report defines a critical index necessary for the casting of cellophane?"

By Mr. FITZPATRICK.

Q. Could you answer that, Mr. Ernst?

A. I think it is on page 67 or 68.

Q. 67 and 68? If I give you pages 67 and 68 of the Cullen report, Mr. Ernst, could you tell me wherein any critical range of indices is pointed out there?

A. It is pointed out on page 67.

Q. Whereabouts on page 67, sir?

A. "Mr. Brandenberger prefers for both baths and index
8347 under 1 and a viscosity of 150. One of the best productions from No. 3 casting machine acid bath was on an index of 1.6, viscosity 200;"——

Q. Just a second. Now—

Mr. GESELL. Wait a minute. He is trying to answer the question, your Honor. Can't he answer the question?

The COURT. Let him finish and then go back to that point, Mr. Fitzpatrick.

By Mr. FITZPATRICK.

Q. Go ahead, Mr. Ernst. Excuse me.

A. Yes. Will you ask the question again, please?

Q. Wherein on pages 67 and 68 of the Cullen report is there any critical range of indices set forth for the manufacture of cellophane?

A. On page 67 here.

Q. Whereabouts on page 67, Mr. Ernst?

A. On the seventh line.

Q. On the seventh line? Would you read that line?

A. There is another page here, page sixty—

Q. Page 69?

A. That is right. No, the other one.

Q. This is just the title sheet. Page 65?

A. Yes, 65. There it says, "The clarity of cellophane depends upon viscose having an index below 1.5." That index refers to the casting index.

8348 Q. Is that the critical casting index?

A. That is right.

Q. Now, will you look at page 67?

A. This index of 4.4, 0.6, and the average of 1.3 to 2, these indices were taken at different points and have no reference to the casting index whatsoever.

Q. From where do you establish that, Mr. Ernst?

A. Because the index is much higher. It was before the viscose was ripened and ready to be cast.

8349 Q. May I see the sheet for a second, sir? Does the heading above those indices note that the index is taken at the casting machine?

A. It says at the casting machine here.

Q. At the casting machine. Would you say that an index of .6 was not ripe enough?

A. No, I would not.

Q. Well then, isn't it true that this is the average, this 1.83 figure is the average indices of those films that have actually been cast in the use on that casting machine at Bezons?

A. These indices that have been taken were taken before the viscose was blended.

Q. Could you tell me of what value that average figure of 1.83 is then?

A. That in this particular case was an average—was an index of casting.

Q. It was an index of casting?

A. It was.

Q. It was cast at 1.83?

A. I suppose it was.

Q. Well now, let us clarify it, Mr. Ernst. You just told us that these indices were taken not at the casting time but at a time that was too early?

A. Some of those must have been taken, because they
8350 could not be 4.4 at the casting spot, so an error may have been made in getting these indices because there is no 4.4 index at the casting machine.

Q. There is no 4.4 index at the casting machine? Then that 1.83 average is valueless?

A. That 1.83 average in this case here is an average of two indices taken, the 0.6 and the 4.4. But those indices must have been taken, the 4.4 and the 0.6, before the viscose was ready to be cast from the hopper.

Q. In other words, you say, Mr. Ernst, that the 1.5 value for the index is a critical one which is necessary for the casting of a clear film?

A. It is a critical one with tolerance up or down.

Q. What is the tolerance, Mr. Ernst? Are those averages there indicative of the tolerance?

A. I think they are.

Q. They are? In other words, the range set forth there, from .6 to 4.4,——

A. No; the range from 1.5 to 1.8. This is the average of 1.8, and this is apparently the viscose that was cast.

Q. The average figure is the viscose that was cast? Where does the report say that, Mr. Ernst?

A. The report does not say it.

Q. Then how do you arrive at it?

A. From actual experience, the way it was run.

8351 Q. But that figure of 1.83 is just an average of 4.4 and .6?

A. Yes, that is, right.

Q. Would you average then, Mr. Ernst, 4.4 and .6, and tell me what you come out with?

A. I wouldn't——

Mr. FITZPATRICK. I will strike that question.

The WITNESS. No; that was 3—the average would be 3 there. This report has been taken—this is information that has been taken from another report in France, and I personally did not take this report.

Q. Well then, you don't know what value this report is, as far as those indices limits are set forth?

A. The indices as shown in this report are all in the range of viscose that has been made during the time I was there, and cellophane made from them.

Q. At 4.4?

A. No, I don't say at 4.4, but the viscoses were made with those indices. And cellophane was made at the viscosity of 1.83.

Q. Well, if cellophane was made at a viscosity of 1.83, at an index of 1.83, and they have arrived at that average of 1.83 by

figuring the average between 4.4 and .6, they must have cast a film at 4.4?

A. I can't say that. I didn't make the report, neither
8352 did I have—I have no knowledge of it.

Q. You have no knowledge of the report, I take it, then?

A. I have knowledge of the report, but I have no knowledge of those specific figures.

Q. Well then, could you tell us a critical index value for the casting of cellophane?

A. I could at the time, in 1924.

Q. At 1923 or 1924?

A. 1.5, plus or minus 3/10ths of 1%.

Q. Would you turn to Page 42 of the report? Would you read me the sentence starting in the middle of the second paragraph on that page?

A. "The film was from viscose of index 2.5 and ran perfectly without breaks."

Mr. GESELL. That is not Page 42, is it?

Mr. FITZPATRICK. It is Page 42 as I remember it.

The WITNESS. Yes.

Mr. GESELL. It is not on Page 42 of the one in evidence.

Mr. FITZPATRICK. Yes, it is, right there.

Mr. GESELL. That is the third paragraph, isn't it?

Mr. FITZPATRICK. I am sorry.

By Mr. FITZPATRICK:

Q. Well then, I take it there, Mr. Ernst, that we had a film running which had been cast at an index of 2.5, and you
8353 have just set the critical limit as 3/10ths above 1.5; so the report was contradictory, was it not?

A. Well, there again, I didn't run the batch. I wasn't there, so I can't tell you. I don't know what kind of film came out of it. I didn't see it.

Q. In other words, then, Mr. Ernst, your knowledge of this report is very, very limited, is it not?

A. I did not study the report and have it in my mind by heart, but I have had knowledge of the report and I have read it.

Q. Would you turn to Page 67 again, Mr. Ernst, to line 3? Does it not say there that the most satisfactory index for casting in the acid bath is 2?

A. That's right.

Q. Again a contradiction; am I not right, Mr. Ernst?

A. No; it says there for sodium sulfate; it does not say in an acid bath.

Q. Would you read the entire sentence there, sir?

A. "At the discharge of the viscose mixers, the most satisfactory index is from 11½ to 12; viscosity 150 to 180, Bezons standard.

For casting purposes, the most satisfactory H_2SO_4, sulfuric acid, sodium sulfate index is 2." That is a mixture of sulfuric acid and sodium sulfate. "And for the ammonium sulfate bath, 1 is preferable."

Q. Could you tell us at that time what type of casting
8354 baths were being used?

A. You mean the concentration?

Q. No, sir. Was it not true that there was a sulfuric acid bath and ammonium sulfate bath?

A. That's right.

Q. You could use either one?

A. Depending on what kind of film you wanted to make.

Q. The ammonium sulfate for the thick films and the sulfuric acid for the thin films?

A. That is primarily correct; that's right.

Q. And that sentence there states that the satisfactory index for the sulfuric acid bath is 2 and for the ammonium sulfate bath 1?

A. That's right. That is what it states.

Q. Now then, would you go to Line 5? There it says, does it not, that Mr. Brandenberger himself prefers an index below 1 for both baths?

A. That is a preference; it is not an actuality.

Q. And would you go to Line 8? Is it not true that this statement appears on Line 8, "It is better not to have your index below 1 as slight interruptions in film flow might cause solution to solidify"?

A. Well, that is what is brought out. The nature of the viscose is such that as soon as the index does drop to that point it will solidify.

8355 Q. Then who would you say is right, Mr. Ernst, Mr. Brandenberger or the writer of this report?

A. It is all interrelated, depending on what kind of an acid concentration he used or what kind of an index he used. Both are right and both could be wrong.

Q. From the information contained on that page, is there anything about acid concentrations relating to the various indices used, or does it just mention acid?

A. It does relate, just exactly what I was referring to, that a change in the indices will ask for a change in the speed of the machine, or vice versa.

8356 Q. Well, then, Mr. Ernst, would you give us again your range of critical indices for the casting of cellophane, or may I re-phrase the question and say there isn't anything critical about the indices, but that it is a variety of factors which add up to which index you may choose?

A. No, that is still limited. At that time it was—with the knowledge that we had of the process there was a limit of indices. There was a limit in connection with the speed of the machine and the sulphuric acid or ammonium sulphate bath.

Q. And for clear cellophane that was 1.5 plus or minus three-tenths?

A. That is the way we ran it.

Q. Mr. Ernst, do you have any idea of the salt indices used in the manufacture of rayon at the casting point?

A. No, I don't remember.

Q. Are you familiar with the technical division handbook of the Pioneer Research Section, 1941, entitled "Cellophane Technical Handbook" put out by the Dupont Company?

A. No.

Q. Would you read the last sentence——

Mr. GESELL. I object to that, your Honor. It is not in evidence. He says he has no familiarity with it.

Mr. FITZPATRICK. May I offer it——

Mr. GESELL. It is not your case.

8357 The COURT. You may have it marked for identification; then later in rebuttal offer it in evidence. In the meantime you can interrogate the witness on the document.

Mr. FITZPATRICK. On this document, sir?

The COURT. Is that the one you want him to read?

Mr. FITZPATRICK. Yes, sir.

The COURT. That is the one. That is the procedure to follow.

Mr. FITZPATRICK. I then would like to offer for identification Government Exhibit 999.

(The "Cellophane Technical Handbook" was marked "Government's Exhibit No. 999 for Identification.")

Mr. GESELL. Will you state what that is for the record?

Mr. FITZPATRICK. I believe I already have stated what it is, but it is entitled "The Cellophane Technical Handbook," a report covering the physical and chemical properties of thin, transparent sheeting from regenerated cellulose.

Mr. GESELL. May I see it a minute?

Mr. FITZPATRICK. Yes.

By Mr. FITZPATRICK.

Q. Would you agree with this statement contained on the last three lines of page 13 of Government Exhibit for Identification 999:

8358 "In the viscose process for cellophane and rayon it is customary to cast or spin the viscose at various salt indices between 1 and 3, depending upon the internal character and internal composition of the viscose prepared."

A. I am referring back to 1924. I would say no, it was not technical knowledge at that time.

The COURT. What is the date of the publication?

Mr. FITZPATRICK. 1941, sir.

The WITNESS. I have no recollection of that or have not read it.

By the COURT.

Q. What was the date of the report, Mr. Ernst?

A. The date of the report is, I think, October 1923—September or October.

Mr. GESELL. September 1923.

By Mr. FITZPATRICK.

Q. Is there not, Mr. Ernst, evidence in this Cullen report that cellophane having indices from 1 to 3 had been cast in the Bezon plant?

A. Yes, I think there is evidence.

Q. Now, Mr. Ernst, you knew nothing of the indices which the rayon manufacturers were using at that time, did you?

A. Practically nothing.

Q. Now, Mr. Ernst, the next step in the process of manufacture, turning from the chemical building, is the
8359 casting hopper, and as I remember it you have testified that you brought one of these hoppers to this country; is that not correct?

A. That is right.

Q. This casting hopper, is it a part of the casting machine, would you say?

A. It is a separate machine.

Q. Would you say that any hoppers for the manufacture of cellophane had been known to the public prior to 1923?

A. Not to my knowledge.

Q. Are you familiar with a patent by Jacques Brandenberger dated January 7, 1923 entitled "Hopper for Producing Cellulose Plates and Films"?

A. Yes.

Q. Was that a hopper for the casting of cellophane, Mr. Ernst?

A. Well, you could call it that, but I don't.

Q. Would you disagree with this statement in Mr. Brandenberger's patent on page 1, column 1:

"Be it known that I, Jacques Brandenberger, a citizen of the Republic of Switzerland, have invented a new and useful improvement in or relating to hoppers for producing cellulose plates and films, which improvements are fully set forth in the following specification:"

A. There is a drawing to that patent, isn't there?

8360 Q. There is, sir. Would you like to see it?

A. Yes. This is the patent taken out in 1913.

Q. That is correct; prior to 1923.

A. That was prior to 1923, yes.

Q. In other words, prior to 1923 hoppers for the manufacture of cellophane were known to the public at large?

A. Yes, that type.

Q. In other words, this particular hopper which you brought to this country was not essential for the manufacture of cellophane?

A. Entirely essential.

Q. And yet this hopper had been patented ten years before?

A. That is a picture of a hopper; that is not an actual hopper.

Q. You mean to say that Mr. Brandenberger was in the habit of not disclosing sufficient information in his patent applications?

A. I didn't make such a statement and I would not.

Q. Well, is it not true that this should be an adequate disclosure for someone to manufacture and produce a hopper?

A. The fact is that the patent has been granted in the United States. That ought to be sufficient.

Q. Now, Mr. Ernst, as I remember your testimony you
8361 stated that you came over here with a crew of top, cracker jack mechanics and craftsmen——

A. No, I didn't say anything of that sort.

Q. Just what was the team that you brought over here, Mr. Ernst?

A. I brought over crack operators that knew how to start up a cellophane machine and a hopper.

Q. They were still skilled in the mechanics——

A. I did not say mechanics.

Q. What were they skilled in, Mr. Ernst?

A. I said the operation of a casting machine.

Q. As I remember it, Mr. Ernst, you testified that it took a year to train a new operator in how to work this hopper mechanism?

A. That is right.

Q. Going back to the time you went into the cellophane business with La Cellophane I believe you learned the entire process in less than a year or within a year?

A. That is correct.

Q. Now, going from the hopper, Mr. Ernst, to the casting baths. I believe that you testified that the specific acid concentration of the first bath was very important to the production of a clear and good film. Is that not true?

A. All the baths were important.

Q. I believe in your testimony you mentioned the first.
8362 and I would like to refer you to page 83 of this technical

report and ask you to read to the Court the concentrations which I have circled for sulphuric acid and sodium sulphate. That is the first bath they are referring to, is it not, sir?

A. Yes, H_2SO_4, 8 to 12 grams per hundred cc's—10 grams is almost right for index 1.5 to 2.3.

Q. If I may interrupt you for just a second, I refer you to page 2 of Brandenberger's patent No. 1,548,864, and ask you is it not true that in that column discussing the first acid bath Mr. Brandenberger discloses to the public that 10 grams of sulphuric acid per hundred cc's solution is the proper concentration?

A. That is right.

Q. Now would you go back to page 83 of the report and read the concentration for Na_2SO_4?

A. 10 grams.

Q. And the patent says——

A. 10 grams.

Q. Is it not true also, Mr. Ernst, that the specific order of bath tanks that are set forth in this process with their ingredients are set forth in the patent?

A. They are.

Q. They are set forth in the specific sequential order that they are set forth in the Cullen report; is that not true?

A. No, it is not quite as the Cullen report. It gives
8363 the number of tanks and the sequence, but not how many of this or how many of that.

Q. I misunderstand you there, sir. How many of what?

A. How many of reactive tanks and how many wash tanks, bleach tanks, glycerine tanks.

Q. It does not tell you how many wash tanks?

A. It does not.

Q. How many tanks are there outlined in the Cullen report?

A. I think 15.

Q. I give you here pages 82 to 89 of that report entitled "Casting Machine Baths" and ask you to tell me the number of the last bath disclosed there?

A. It says here "Tank No. 11" is the last one.

Q. Tank No. 11? Are you sure it is not 14, sir? Tank No. 14, glycerine solution?

A. 15–14.

Q. Would you read the last bath decribed in the patent, the number and the solution which is contained therein? Is that not also the glycerine bath No. 14?

A. That is right.

Q. Can you find me anywhere in this report a bath which is not disclosed in that patent in its precise order?

A. Well, No. 2 is not one tank. No. 2 is two tanks. It does not show on the patent here.

8364 Q. Two tanks of what, sir?

A. Two tanks of acid.

Q. Both sulphuric acid; right?

A. That is right.

Q. The patent shows one tank with sulphuric acid; is that not right? Different concentration?

A. Yes, that was a split tank.

Q. You discussed the drier, which I believe follows the casting bath process?

A. That is right.

Q. Is it not true that the drier which is discussed in the Cullen report is fully disclosed in Brandenberger Patent No. 1,606,824, which I show you?

A. It is disclosed, yes.

Q. Is it not true, Mr. Ernst, that even prior to that in 1911 Mr. Brandenberger had patented another type drier mechanism for the manufacturer of cellophane?

A. That is right. I have seen the patent.

Q. Mr. Ernst, one last attempt to—I show you the defendant's table of contents for Mr. Cullen's report and ask you if there is any section of that report which you would classify as secret, or do you still classify the entire report as secret?

A. Of course, the information from the report are not informations that you could have gotten out of the patent.

8365 Q. In other words, in the nature of supplementing know-how?

A. Know-how of the idea, of the process, but not know-how for commercial manufacturing.

Q. The report did not contain know-how for commercial manufacturing?

A. Hardly.

Q. This report did not contain know-how for commercial manufacturing?

A. Not without the help of those Frenchmen and myself, coming over to give the actual——

Q. Were the ideas expressed in the patents?

A. Ideas are expressed in the patents, and a process is outlined, but it is hard for me to believe that from the patent commercial film cellophane could have been made without any help.

Q. Well then, Mr. Ernst, if the ideas were in the patents and the commercial operating know-how was not in this report, what was in the report?

A. Specifications as to——

Q. Particular material?

A. Materials and methods of operating.

Q. Now, Mr. Ernst, you have testified that in 1923 you had been in the cellophane business only one year and that you were fresh out of college prior to that entrance; is that not true?

8366 A. That's right.

Q. You had not at that time had any experience in rayon viscose?

A. That's right.

Q. Were you familiar with the work of Cross and Bevan, in England?

A. I read about it. That came out in 1898 or some place around there. I was born in 1899, and I left college in 1921.

Q. Were you familiar that in 1898 a man named Stearns applied for and received a British patent for the manufacture of film cellulose?

A. No,—what type of cellulose? Cellulose nitrate, or some other kind of cellulose?

Q. I am not able to answer that question, Mr. Ernst; I was just asking you. You mentioned before that you were not familiar with the Manchester Viscose Company in England?

A. No.

Q. In other words, is it fair to say that when you went to La Cellophane you had little or no conception of what was secret and what was not secret in the manufacture of cellophane?

A. No; I knew what the—the manufacturing end of the cellophane, I had well in my hands. The viscose process at that time was not particularly in my line, but the manufacture of cellophane from viscose, that part of the production was under my di-

8367 rection, and I believe the past performance points to that, that success was made in manufacturing cellophane in the United States.

Q. But still upon what basis do you base your opinion that this information was secret, if you were not familiar with all these publications?

A. I am not taking any—I am not saying that the manufacturing of viscose was secret at all. It was not. It was well known. After all, I just mentioned that I knew about Cross and Bevan, and I knew something—I read about them. But there is a difference between that—that is one phase of the manufacture of cellophane. The other phase is making a film out of viscose rather than a thread out of viscose.

Q. But you did not know that Chorley, working with the Manchester Viscose Company, had developed a film substantially similar to cellophane?

A. No, I have never seen it.

Q. Just one more thing, Mr. Ernst. You mentioned, I believe, that there were two casting machines in operation at Bezons; is that correct?

A. Well, by the time I left there were—the third and fourth of them were built.

Q. But the plant was in operation and running with two casting machines?

A. That's right.

Q. Would you say then that it was possible to manu-
8368 facture cellophane commercially with two casting machines?

A. In France.

Q. How many did Dupont have when they opened up here, sir?

A. We started with two. I started with the first one, I started the first one in April 1924. The second one came around in May.

Mr. FITZPATRICK. Thank you; no more questions.

Redirect-examination by Mr. GESELL:

Q. I have only two or three questions, Mr. Ernst. Showing you Page 68, a portion of which was called to your attention by Mr. Fitzpatrick, the range of viscose ripening indices shown there are for 69 specific tank charges, are they not?

A. Yes, that's right.

Q. And the minimums and maximums and averages are shown; isn't that right?

A. Right.

Q. Now you said to Mr. Fitzpatrick that those ranges before the average were prior to blending. What did you mean by that?

Mr. FITZPATRICK. I object. He did not say prior to blending.

The WITNESS. I did.

Mr. GESELL. He did, Mr. Fitzpatrick.

8369 The COURT. Well, if he did not say it, apparently he wants to correct his statement.

Mr. GESELL. He said prior to blending and you overlooked it in your examination.

The COURT. Very well, proceed.

By Mr. GESELL.

Q. Did you say prior to blending?

A. I said before blending. I didn't use the word prior.

Q. What did you mean by before blending?

A. Where viscose charges are adjusted to a certain index, starting out with charges over and above a certain limit, to bring it to a certain limit.

Q. You mean by taking it from different tanks before you feed it into the hopper?

A. That's right.

Q. Supposing you cast viscose at Benzons with 4.4 index. What kind of cellophane would you have had?

A. At that time what we would have had is cellophane with bubbles in it. I mean cellophane—and spotty—that we could not have, or that could not have been used at all, on account of the reaction, the fast reaction, of acid with the green viscose.

Q. You were also shown a patent issuing to Brandenberger in this country on the hopper, you will recall, and you re-
8370 ferred to the diagram of that.

A. Right.

Q. Could you make cellophane on a commercially satisfactory basis with the hopper shown in that patent?

A. Definitely not.

Q. That was not the hopper that was used in the manufacture at Buffalo, was it?

A. It was not.

Q. In what respect did the hopper at Buffalo differ from the hopper shown in that patent?

A. The hopper shown in the patent is not adjustable, and the gauge can not be controlled on that hopper, while the hopper that I brought over from France could be adjusted to make film of any thickness, within limits up to two-thousandths of an inch.

Q. You were asked on several occasions whether or not the process was disclosed by these early 1913 patents, and as I recall you said that the process was. Now what did you mean by the process?

A. The ideas were disclosed, but not the actual process.

Q. Could you have made commercial cellophane using the disclosures of those early patents?

A. Definitely not.

Mr. Gesell. No further questions.

8371 The Court. You are excused, Mr. Ernst.

Ernst B. Benger, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

Mr. Gesell. If your Honor please, Dr. Benger's testimony will supplement that of Mr. Ernst in several important respects. He is a research chemist who worked for Dupont for some thirty years and was the first research director of the Dupont Cellophane Company. He will deal with the value of the cellophane technology to Dupont at the time the Dupont cellophane began manufacturing. He will point up in this connection the limited amount of experience and commercial know-how available to Dupont, Dupont's limited chemical background and experience at the time, and other factors bearing on the significance of this secret information which was received at the time they entered the business.

He will also deal with Dupont's research policies in some of the later years.

Direct Examination by Mr. Gesell.

Q. What is your full name, Dr. Benger?

A. Ernest Baden Benger.

Q. How long were you employed by Dupont? From what year to what year?

A. 1917 to 1947.

8372 Q. And you are now a State Senator of the Delaware Legislature, are you not?

A. I am.

Q. What was the nature of your technical training before you joined Dupont?

A. I was given a B. S. degree in chemistry at Grinnel College, and the M. S. degree in chemistry at the University of Wisconsin, and a Ph. D. degree in chemistry at the University of Wisconsin.

Q. What was the general nature of the work and duties which you had while you were with Dupont in the period you have just mentioned?

A. I started out as a research chemist in the laboratory and went through various stages of research supervision and management having to do with cellulose industries mostly, relating both to chemical and mechanical research.

Q. And later did you have various supervisory activities? And what were they?

A. Do you refer to the field that I have covered in my Dupont experience?

Q. Yes.

A. My first work was what you might call straight chemical research on raw materials for the company. Then I went into fabrikoid, and that is a coated textile. From there I went to motion picture film. From there into the fabrikoid

8373 business, as chemical superintendent. From there to Buffalo as chemical director of the cellophane company and of the rayon company. From there to the position of general chemical director of the Dupont Company, and then to the position of assistant manager and manager of the technical division of the rayon department.

Q. Having to do with all of the rayon departments proper?

A. That's right; including cellophane.

Q. Dr. Benger, when did you say you first became connected with cellophane?

A. In 1924.

Q. What was the extent of Dupont's cellophane development as of that time?

A. One machine was in operation when I arrived and the second machine came in soon after I arrived.

Q. When you say arrived, you mean arrived at Buffalo, I take it?

A. I arrived at Buffalo in that position; that's right.

Q. What was the extent of the Dupont Cellophane Company's research organization at that time?

A. I was it.

Q. You were it? And what was the extent of your own knowledge at that time of cellophane chemistry and cellophane processes?

A. Practically zero.

8374 Q. What was the extent of the research organization in rayon at that time?

A. Well, rayon had two men, both of them rather poorly qualified, neither of them completely trained, doing research in rayon.

Q. Was there any other place in the Dupont organization at that time other than in rayon and cellophane that there were chemists or technicians skilled in any aspect of this viscose chemistry?

A. I think not.

Q. Could you tell us, Dr. Benger, in some detail, what the state of Dupont's chemical research and engineering organization and setup was at that time, at the early beginnings of the cellophane operations?

A. Well, Mr. Gesell, that involves perhaps showing a picture that is a little hard of comprehension in 1952. In view of the fact that for ten years or perhaps more Dupont and research have been practically synonymous. In 1924, research in the Dupont Company was in a definitely embryonic stage. Research facilities were generally very inadequate. Real research laboratories were scarce. Research chemists, properly trained research chemists, were difficult to find. We had just gotten over the era when the best Ph. D's were given in Germany. American universities were just picking up the load. The of Ph. D. men taking
8375 their Ph. D. degree every year was very small compared with now. And in general research seemed to be looked upon as either a frill or a necessary evil to be put up with. The state of the development that has taken place since then is probably incomprehensible to most people who are not chemists and have not seen that happen, and there are very few men who are of an age sufficient to have gone through it, even if they had been in the chemical industry since they became engaged in business. But perhaps by drawing some analogies with other developments, those present can get some idea of what the chemical industry was.

I would like to refer to radio. I hope I am not getting off the subject. I am trying to draw a picture of an industry about which

I know very little, which is comparable, I think, in its later development, to the chemical industry. Perhaps it has been slow. In 1924 I believe that radio sets were made with a quartz crystal and a cat-whisker, that the commercial radio sets were very inadequate and commercial broadcasting was on a very low level. At that time the chemical industry was in the same stage of development. The chemical research industry, chemical research business, was in the same early stage of development. And in these intervening years we have seen research grow tremendously. For example, in 1924, the first year of cellophane operation, less than $1,000 was spent on chemical research. In that same year the whole Dupont Company spent about a million dollars
8376 on research. Now in 1951 the Dupont Company spent $73,000,000 on research and technical work, as compared with one million in 1924. Perhaps that draws the picture as well as anything could. The American Chemical Society had about 15,000 members in 1924, and in 1951 or 1952 it has 66,000 over. This represents a great development.

Q. What was the situation, Dr. Benger, with respect to engineers and engineering organizations working with the chemists?

A. Well, the engineers did what might be called engineering research and mechanical research, were only trained for that kind of business. They were men with a flare for mechanical developments. But there was practically no training for a research engineer.

Q. What do you mean by a research engineer?

A. A man particularly trained to undertake the generation and development of new ideas in engineering.

Q. What was the extent of the practical commercial knowledge at the time of viscose and its characteristics and chemistry?

A. The ordinary chemist knew practically nothing about it. I presume there was something in the literature, but it never seemed very important to the chemical men, the research men, and I doubt that it had any real significance at that time.

8377 Q. Dr. Benger, did Dupont utilize the information that was contained in this Smith-Cullen report and the other information that was obtained from the French?

A. Yes.

Q. Was that information kept confidential?

A. Yes.

Q. What steps were taken by Dupont in the United States, that you recall, to preserve the confidential character of the information?

A. Well, of course, the plant was protected by fences and gatehouses and guards, and there was a pass system used so that work-

men who came in from the outside and contractors brought in to do work signed those passes, which was a statement that they realized they had secret information and they were not permitted to disclose it. Such strangers, as you might call them, were generally conveyed to the plant either by a guard or a trusted employe, and they were not allowed to waste time around, they were under supervision, because it was considered it was no place for people who were not connected with the business. And that was designed to protect the confidential nature of those operations.

Q. Did technical representatives of the Dupont Company have access to the Dupont Cellophane Company works to get information?

A. We all signed an employe agreement which swore us
8378 to secrecy on confidential information. And I recall at that time a cellophane company was 51% owned by Dupont, I think, and the other 49% by the French. I recall that my superiors cautioned me particularly not to allow information which came from the French to find its way into the Dupont parent company. It was the property of the subsidiary, the Dupont Cellophane Company, and I was cautioned to not allow that information to get into the parent company; they had no business having it.

8379 Q. Did you ever make any visit to La Cellophane's plant in France?

A. Yes, sir.

Q. When was that?

A. I can't be sure of the year. I would guess it is about 1926 or 1927.

Q. Are you aware of any steps taken by the French to maintain the confidential character of their process and operations there?

A. Yes, sir.

Q. What steps did they take?

A. I was rather amused by the fact that I would not be accepted as a proper representative of the Cellophane Company until a photograph of me which had been sent on in advance and had been compared with me.

Q. What experience, Dr. Benger, have you had over the years in the development of new products and processes requiring chemical and engineering knowledge?

A. Well, in the first place, I have been connected with the development of improved and diverse characters of fabrikoid. The whole motion picture film industry was new to Dupont. I was director of the laboratory when I left there. I was Superintendent at Newburgh when new types of fabrikoid were developed and also rubber products at the Fairfield factory in Connecticut.

8380 We introduced entirely new types of fabrikoid and used entirely new types of raw materials in that work in the processes developed in fabrikoid.

At Buffalo, having received cellophane, plain transparent cellophane from the French, I was involved in the development of processes for moistureproofing and in the development of processes for stronger and better rayon.

In my capacity as General Assistant Chemical Director of the Dupont Company and later as Manager of the Technical Division of the Rayon Department I had a hand in the development of nylon and of the newer fibres which are just being commercialized now, orlon and dacron.

Q. On the basis of your technical training, your experience that you have just recited, and your knowledge of cellophane and rayon operations do you have an opinion as to whether or not Dupont could have entered upon the manufacture of plain cellophane without any of the French information?

A. Yes, sir.

Q. What is that opinion?

A. I have great faith in Dupont's research ability and I think they could have developed a process without the French knowledge.

Q. How long do you think it would have taken to do that, Dr. Benger?

A. Now, of course, in answering that question I am making a statement that is not subject to proof. I don't know,
8381 of course. It certainly would depend upon a great many factors such as How much money are you willing to spend per year? How many research chemists can you hire, what kind of engineers? But if somebody had asked me in 1924 whether the Dupont Company could develop a cellophane process and how long it would take I would have said, I think, that it is a long job, and my opinion now is that I would have said then that it would have taken somewheres between five and eight years.

Q. Can you tell us in some detail the steps that you think would have had to have been taken if you did not have the background of this information and manufacturing know-how and what some of the time and other factors involved would have been?

A. Well, I am afraid I will bore the Court if I answer that question as fully as would be necessary to convey a clear impression of what the magnitude of the job is, and I don't want to bore the Court or anybody else.

By the COURT:

Q. How many days would it take?

A. Pardon me?

Q. How many days would it take?

A. The rest of this day.

The COURT. All right. Go on.

Mr. GESELL. He means to tell the story, not to
8382 make the cellophane.

A. (Continuing.) Yes, I think that is what I understood. Well, I have just recently gone over in my mind the steps in the manufacture of cellophane and the variables in it, and there are 50 variables that can be very easily recognized, and I am sure that is an understatement. Now, these 50 variables have got to be tested out in all their combinations and permutation. I am told that there are more than a million combinations and permutations in 50 variables. I don't know. I am not a mathematician. I may be way off. I don't mean to insinuate that any chemist would go through a million combinations and permutations with 50 variables. I definitely do mean to convey the idea that there would be thousands of them and that the job would be a very tedious one. That is what I call systematic research.

We would start with steeping: The kind of cellulose to start with, wood pulp, varieties of wood pulp, and what have you, caustic soda, the commercial quality of caustic soda, its impurities, the concentration to be used in steeping, the amount of hemicellulose to be permitted, the effect of impurities such as the metallic impurities that are often found in caustic soda, the time of steeping, the degree of pressing to remove the excess of caustic soda to get the alkali cellulose sheet.

The next step would be shredding: The amount of
8383 shredding, the state of the knives, how closely should you cut, what is the effect of crushing versus cutting, the temperature and the time of shredding, the effect of carbon dioxide in the atmosphere, the humidity of the atmosphere on the shredding operation and on the subsequent alkali cellulose, aging or ripening, as it is sometimes called, the amount of time given to alkali cellulose aging, the xanthation operation, the amount of carbon bisulphide in relation to the charge of cellulose, the temperature, the rate of agitation largely to get the physical properties of the xanthate necessary for solution——

By the COURT:

Q. May I ask a question?

A. Yes.

Q. Your recitation so far, is that based on our supposititious situation, namely, that Dupont is starting from scratch, or that it has to do all these things even in the light of the prior art?

A. The latter.

The COURT. Proceed.

A. (Continuing.) I think I should perhaps short circuit this, because I believe that I am conveying the idea that in these steps that have been recognized as the major steps, steeping, shredding, xanthation, solution mixing, ripening of viscose, and so on,
8384 there are many variables—time and temperature is in practically every one of them; concentration is in practically every one of them; the presence and effect of impurities is in practically every one of them, and I submit that it is impossible to overlook any of the factors that I have mentioned and that that is true in the rest of the process; and I am omitting the rest of it in spite of the suggestion that it would be all right to take the rest of the afternoon; but I will go ahead with it if it is desired.

By Mr. GESELL:

Q. What step of the process have you come to now? You are down to the viscose?

A. I would say we are finished with xanthation and ready for solution mixing or dissolving the viscose.

Q. Will you proceed with the res of the explanation?

A. In the solution mixing: The caustic used in relation to the amount of water and in relation to the amount of cellulose xanthate, the question as to whether exhaust caustic or pressed caustic from the first operation of steeping could be used for solution mixing, and if so, to what extent, are other practical problems that would have to be answered; and then we go into the ripening and the control of index.

Now, an index—I have forgotten most of the details of this operation, but I remember very clearly the outlines of it.

Q. May I ask at this stage would you have had to go
8385 through any of the phases you described if, as was the case, Dupont was already manufacturing viscose for rayon in order to manufacture a satisfactory viscose for cellophane?

A. Rayon conditions—rayon requirements were quite different. The product is different. The chemical nature of the product while theoretically identical, needs to be—does not need to be the same; it should not be the same; and the knowledge that you have from rayon manufacture as to viscose is fundamentally all there, but since you are making a different product, looking for different characteristics in the product, you can take nothing for granted. You could start with a rayon viscose and you could make by a series of alterations, I suppose, a transparent sheet. Whether that sheet would be commercial, whether it would be desirable, whether it would be the best sheet I don't know. I don't know whether it has ever been tried. I presume it has.

Q. So you would go back to the very beginning of the process and go all the way through looking for the proper type of viscose for casting to cellophane?

A. That is right.

Q. Will you proceed?

A. In the ripening operation we would go through this series of—this continuous change of index that has been referred to and attempt to stop that operation at some point that would give us the best product. I don't know where that would be. It would depend upon other factors in addition to the index itself. Then we would go through this casting operation. You understand, in beginning this thing we would not begin with a cellophane machine.

8386

Q. What do you mean by that?

A. We would not begin with a machine that is shown in the patents. We would not begin with a machine any place. We would begin with glass plates. It would be rather too expensive to carry out experimentation on the scale of a casting machine, very much too expensive in terms of both materials wasted and in terms of time required, because you can cast something in a few minutes as compared with a much longer time on a continuous machine, and we would certainly have started with the simplest device we could have started for development and testing purposes, and that would be a glass plate or metal plate.

May I have a glass of water?

Thus, the films that were cast on those plates could be cast relatively rapidly. You could perhaps make a dozen films in a day—that is, if you had the viscos you could cast the films and purify them. The experimental work would go relatively rapidly when carried out on such a small scale as glass plates of the kind you could hold in your hand. There would be no machinery, a minimum of machinery involved both in the viscose preparation and in the casting and purification of the film.

8387

To go on with the variables, we would not have the hopper problem, because we would not have a hopper; we would simply spread on glass plates with the old technique which is known as the use of a spreader knife which would not be much different from the spatula which would be held up on both edges so that you could get a pre-determined thickness of viscose. Then we go through all the variations in coagulation and there would be no way out of that, in my opinion, unless you would be fortuitous enough to have found in the patent application or otherwise the exact formula that exactly fitted all of the 50 variables that you had previously gone through.

Q. Was there any such patent in 1923 or 1924?

A. I don't know of any.

The purification of the film, desulphuring, washing, drying, bleaching, deglycerinating, all of the subsequent steps in purification and glycerinating would have been carried through on these small films. Finally the dried product would be tested for tensile strength, elongation, tearing strength, aging quality, transparency, and I don't know how many more, if any.

Mr. Gesell, in answering your question I could easily be misunderstood. I don't intend to convey the impression that any chemist with any proper background would attempt to
8388 do everything that can be done with viscose in the manufacture of the viscose or in its coagulation to a transparent film. I am assuring you that the process is highly complicated and it involves a great many separate, distinct steps, each one of those steps subject to changes in temperature, time, concentration, purity and all that sort of thing, all of which would eventually, first or last, have to be taken into consideration.

Q. Once you got what you thought was a satisfactory film spread on a piece of glass what would you have to do? Now, we are still talking about reaching the stage that you were brought to by receipt of this French information from La Cellophane?

A. Well, obviously since we only have a little piece of film six or twelve inches square, we would have to scale up our operation. Now, I don't know at this juncture how we would have scaled up. We could have done two things: We could have cast films on plates six feet square, which would have been a scaling up, or we could have said obviously we are never going to be able to sell film except of continuous lengths and said, therefore, we must find some way of casting it on a continuous scale, which would have been, I suppose, on a belt, a moving belt, or on a wheel, a moving wheel. Now, if we had not gone to the continuous operation at this point,
what we would have done in the bigger films is to refine our
8389 process by reason of larger samples for examination. We can do more with them; we can use them for wrapping and make practical tests.

Q. Suppose you jumped that stage and you went right to a continuous process?

A. We would have shuddered at the prospect, obviously, because it involves mechanical equipment that would have had to be devised for the purpose. The engineers would then come in with the chemists, understand the chemistry of the operation, and begin to dream up machinery that by moving and carrying with it a layer of viscose which would be purified on the run would yield a product something like the product that we had gotten from glass plates and considered satisfactory. Now, when you get into that scale of experimental work you find that you are slowed up a great deal.

Q. Why is that? Why can't you jump right from the test tube to the commercial size operation?

A. There are two primary reasons. One is that never—I think never does a chemist find that his chemistry is the same on a small scale and on a large scale, identically the same. Broadly it is the same. It has been my experience that you never can change the scale of the operation without changing the chemistry that is involved. That is one thing. That means that when you get on this bigger scale much of the experimental work done on plate
8390 films, plate cast films would have to be repeated in view of the continuous operation, the machine under continuous operation.

Q. That would be to find what new variables turned up on the larger scale?

A. Yes. These new variables are referred to by research men as bugs. They appear in new machinery.

Then the other factor that slows you up is that whenever a change has to be made in a piece of equipment the piece of equipment may be out of operation for days or weeks, depending on the extent of the change. In the meantime no information is obtained from your large scale equipment.

Q. How long did you say you thought it would take to go through to a commercial basis?

A. I said I think or at least I will say now it is my opinion that considering the status of research in the United States and in Dupont and in cellophane it would have taken us from five to eight years.

Q. Have you any estimate as to how much it would have cost? I am not talking about plant now, but I am talking about developmental work?

A. That has to be gotten at by looking at the elements. I think maybe if we had undertaken a job like that we might have had an average say of five men working in the laboratory the first year. Maybe we would be sufficiently confident or qualified to dou-
8391 ble that number in a year or two. The number would not have gotten, I think, above ten or fifteen until the engineers came in and started to scale up. Then we would have increased that number by the number of engineers assigned, would perhaps would have been of the order or magnitude of five. When a machine goes into operation you might have to add ten or twenty operators.

Now, in those days, as I recall, it cost $10,000 a year to sustain one research man.

Q. That is salary and overhead and other things related to it?

A. The materials he used, the equipment he used, except the big equipment, which is not charged into that. On that basis I

believe it would take about 50 man years as a minimum. That is an average of ten men for five years. That is a lower figure, and I think that figures out to half a million dollars. Then there would have been the equipment. The semi-works machines in my guess would have cost—when you got to the full scale machine it might have cost you a quarter of a million dollars, and until then you might have spent another $50,000. This is all guess work, of course.

And so I would say that in the five-year period we would have probably spent $800,000.

If it had taken eight years, which I have taken as an outside guess, the expenditure would have been over a million dollars, obviously—well over, perhaps.

8392 Q. What was it, Dr. Benger, that you considered was the most important and significant thing which you got from La Cellophane with the disclosure of its process and the related information?

A. Well, of course, Mr. Gesell, the best and most important thing we got was the demonstration that cellophane as a commercial product could be made. It had certain characteristics which seemed very desirable for the American market. Does that answer your question?

Q. Would you describe that as a process or would you describe it as know-how or would you describe it——

A. You mean what we got from the French?

Q. Different phrases have been used for it.

A. Well, we got from the French the knowledge that permitted us to quickly get into cellophane manufacture, knowledge of equipment and processes.

Q. Government counsel have suggested repeatedly in this case that there was nothing novel or unique about the process and that, in effect, it was just a combination of a rayon business with a paper drying machine. What have you got to say about that?

A. Well, that is the opinion of an uninformed person or one with a very superficial look at the process or one without any knowledge of how these developments take place.

8393 Q. Dr. Benger, what did you have, if anything, to do with initiating the research programs which led to the development of moistureproof cellophane?

A. I considered that I initiated them.

Q. Were you in contact with the progress and development as to the moistureproof cellophane?

A. Yes.

Q. How long did it take to do the job, to develop a chemically satisfactory and commercially satisfactory moistureproof cellophane?

A. Well, I would say that what you might call the theory or the elements of the process were developed with remarkable speed because of great fortune in hiring a man who was exactly the type of man for that job. I think we developed the fundamentals of that process in two years. Before the process, however, was commercial we had to devise machinery; we had to find adhesives. There were no adhesives on the market that would be satisfactory with moistureproof cellophane. We had to devise printing inks and methods of handling that cellophane, and altogether the development took somewheres not less than four years, somewhere around four years.

Q. Did La Cellophane or anyone outside of Dupont to your knowledge make any technical contribution to the moistureproof development?

A. Will you repeat the question?

8394 Q. Did La Cellophane or anybody, outside of Dupont to your knowledge make any contribution to the moistureproof cellophane development or its technical character?

A. No.

Q. Going back to your experience, Dr. Benger, to what extent did you have responsibility for the research policies and patenting policies as to cellophane?

A. Well, of course I had a boss. My boss was very generous and he allowed me to run my business—what I considered my business without much interference. He was very—he gave me advice and sometimes he criticized, but in general I felt that that was my responsibility and it seemed to me it was very seldom checked.

Q. During what period or periods was that your responsibility?

A. The periods of 1924 to 1930 and again from 1939 to 1947.

Q. Can you tell us what were the factors that motivated the character and direction of cellophane research under your supervision?

A. That was laid out for us. We had no option on that.

Q. What do you mean it was laid out for you?

A. We have a cellophane operation; we are running it. There are troubles with it. The product lacks characteristics that

8395 we would like to see in it. Obviously a research man's business is to look at that, look at his process, where it is clumsy, where it is expensive, where it causes trouble to workmen or in the final product. He has to look at it from the customer's point of view, through the salesman's eyes. What would be better in cellophane than what we have got? Our problem was laid out for us right there in the solution of those problems.

Q. How did you visualize that problem? What did you think it was?

A. It was very clear. It was a question of the quality of fabrikoid and cost of manufacture.

Q. Quality of what?

A. Pardon me. Quality of cellophane and cost of manufacture.

Q. You say you had a boss. Who was your boss?

A. L. A. Yerkes.

Q. You say he sometimes gave you advice. Did he give you any advice as to cellophane research and patenting policy, and if so, what was it?

A. His advice was mostly in the direction of encouraging me to do the things that sometimes I lacked the courage to do but wanted to do. I call that support. Does that answer your question?

Q. No. Will you explain what you mean by that?

A. Explain what I mean by—oh, well, he wanted re-
8396 search done. He talked to us about quality of product. He constantly held before us the ideal of the highest possible quality in terms of customer acceptance. He wanted us to build an industry that was capable of making a contribution in American society and industry.

Q. It has been suggested here that the purpose of the research and the patents that flowed out of it was to stifle competitors, to build up fences so competitors could not impinge on your business or to block a competitor so he could not exploit a particular invention or development of his. What have you got to say about that?

A. I can say that we would have been very foolish indeed to have taken our eyes off the ball that we had in our hands and begin to look over our shoulders to see what the competitors were doing. We had all we could do. We were not very much interested in what anybody else was doing.

I am firmly of the opinion and have been for many years that a given research organization is qualified to do certain things; it is interested in doing certain things; it has habits of doing certain things in certain ways. When it begins to imitate or watch somebody else try to do what they are doing, then it simply becomes confused and gets no place.

Q. Do you recall ever giving any instructions or anyone else giving instructions that research should be conducted for the pur-
pose of blocking or fencing competitors?

8397 A. I never heard of any such thing.

Mr. GESELL. Your witness.

Cross-examination by Mr. FITZPATRICK:

Q. As I understand, Mr. Benger, you came to the Dupont Cellophane Company in 1924; is that correct?

A. Yes.

Q. Prior to that time did your experience in the field of chemistry involve the rayon business?

A. No.

Q. You stated that in 1924 the chemistry of viscose was practically lacking in this country; is that not true?

A. Perhaps that was too broad a statement if I said that. It was practically lacking in the Dupont Company, I said.

Q. Lacking in the Dupont Company? American Viscose was in full production at that time, was it not?

A. Yes.

Q. Celanese was——

A. In viscose?

Q. In cellulose acetate?

A. Are you talking viscose or cellulose acetate?

Q. I am talking of the production now of any type of rayon, as regards the Celanese Corporation?

A. I think Celanese was in operation with cellulose
8398 acetate.

Q. And they were producing rayon abroad by the viscose process, were they not?

A. I believe that is right.

Q. In your estimate of this five to eight year period, Mr. Benger, which you believe it would have taken the Dupont Company to get into the manufacture of cellophane you have described all the variables, first of all, of the viscose operation?

A. Not all of them, but I have given some typical ones.

Q. Is it not true that those variables are the same variables that are present in that same process in the manufacture of rayon?

A. Yes, sir.

8399 Q. And those variables were known and their controls were known as of that date?

A. I suppose the answer to that is yes, but it probably would stand some qualification.

Q. Now, Mr. Benger, if anyone had wanted to produce cellophane, they knew that it was cast from a solution of viscose, did they not?

A. Yes.

Q. Now they also were able to know that a viscose solution was being manufactured by the rayon producers; is that not true?

A. Yes.

Q. Now wouldn't it be quite logical to use that as a starting point?

A. Yes.

Q. In other words, before you went through all this rigmarole of various controls or anything else, you would start right off with rayon?

A. Yes; rayon viscose.

Q. Rayon viscose?

A. Yes.

Q. Now do you think that would have eliminated much of the variations which you have described to the Court?

A. No.

Q. Nothing.

8400 A. Practically nothing. It might have made you more trouble, as a matter of fact.

Q. The cellulose content would have been so much different?

A. Well,——

Q. If you took rayon viscose?

A. Different from what?

Q. From that necessary to manufacture cellophane?

A. I don't know.

Q. Well, how do you know that it would not eliminate any of these variables then?

A. Because the process deals an entirely different result. It would be entirely fortuitous if the rayon viscose would fit in quickly to a coagulating method and regenerative process and purification process and give a satisfactory product. It would be one of the miracles of the age.

Q. Did you ever try it?

A. No. It would be foolish to try it.

Q. What about the viscose used in caps and bands, Mr. Benger? Is that solution very much different from that used in cellophane?

A. I don't know.

Q. You don't know?

A. No.

Q. Do you know how long it took Mr. Ford, of the Celon

8401 Company, to get into the manufacture of caps and bands?

A. No.

Q. You say that the information disclosed in Brandenberger's presence on the casting baths is not sufficient to enable anyone to set up a casting machine?

A. Well, I don't know whether I said it or not, but if I didn't say it, I will now.

Q. Did you every try it?

A. No. I never tried any of these experiments, you understand; so that answers any questions like that you anticipate asking in the future.

Q. You have characterized this information that the French gave you as the knowledge that permitted us, meaning Dupont, to get quickly into the business; is that correct?

A. That's right.

Q. Would you qualify that further by saying, and very profitably into the business?

A. I was not interested in the profit end of it.

Q. You have stated that the various research that your company would have had to indulge in had it not received this French information was systematic research. From your description, I take that to be trial and error technique; is that correct?

A. It is a little more than that.

Q. Was there any step of, well, as the courts would
8402 describe it, the flash of genius, necessary to develop this product?

A. We didn't do it, so I can't answer the question.

Q. Isn't it true, Mr. Benger, that this type of information which you received from the French was production line know-how?

A. What do you mean by production line know-how? I am not sure of that.

Q. The ability to make a product in a continuous operation with profit on a commercial scale?

A. I think that is what we were getting; yes, sir.

Q. Now, Dr. Benger, you stated in your discussion of moisture proof cellophane that it only took your company two years to develop the product—

A. No, that is a mistake.

Q. Well, would you repeat your statement then again?

A. It took us about two years to get the idea, to develop the theory, the broad concept of what we were going to do. It took us another two years to develop the machinery and get the product ready for the market.

Q. Now would you describe that product to the Court?

A. Moistureproof cellophane?

Q. Yes.

A. I could describe it to you as I last knew it. I have been out of the Dupont Company for five years. It is a plain
8403 transparent sheet of moistureproof cellophane with a wax containing lacquer on both sides.

Q. So the first step in the production of any type of moistureproof cellophane would be the manufacture of a plain transparent film; is that correct?

A. The first step in the moistureproofing of plain transparent cellophane would be to begin with cellophane? Is that your question?

Q. Yes.

A. Yes, sir.

Q. In other words, moistureproof cellophane was an improvement of plain cellophane?

A. Oh, yes.

Q. Now at the time you were interested, or your company was interested, in the development of moistureproof cellophane, would you tell us just how it happened to come about, how the problem came up?

A. I can tell you about it from my own point of view.

Q. All right, sir.

A. We had complaints, because cellophane was found not to hinder the transmission of moisture from a package, from a material which is wrapped in cellophane, or into a material which is wrapped in cellophane. There seemed to be a large field of application which cellophane could meet if it were moistureproof, and which it could not be in the absence of being moisture-
8404 proofed. Does that answer your question?

Q. Yes, sir. In other words, complaints came from the field?

A. No. Yes, yes.

Q. From the users?

A. Yes.

Q. You knew that you had to moistureproof it? You knew that you had to moistureproof the film to make it fit these various conditions of industrial use?

A. The ones that we are talking about.

Q. That's right.

A. Yes.

Q. You also had a pretty good idea that the way to do it was to coat it?

A. No, sir. No, sir.

Q. Have you any idea of what the Indians did with their canoes when moisture started to leak through them?

Mr. GESELL. I object. Your Honor, we can't get back to the Indians.

By Mr. FITZPATRICK.

Q. I am trying to develop the idea, Mr. Benger, that coating is a normal operation when you wish to waterproof a substance. Isn't that true?

A. I don't blame you, Mr. Fitzpatrick. After the grass grows up, it always seems very easy to have seen it grown or to have
8405 heard it grow. It was not at all obvious. It was one of several methods that were considered in the beginning. It was one. And I think it was the last one of the three to be tried.

Q. Had cellophane ever been coated before you went into it, before you went into the moistureproof field, to make it water resistant?

A. I don't know.

Q. I show you a copy of Defendant's Exhibit 2009—I believe it is signed by you, sir—and I ask you whether or not this paragraph is familiar.

A. It is not familiar.

Q. It is not familiar?

A. No.

Q. You don't remember writing it?

A. No.

Q. You don't deny that it is your signature on the letter?

A. I do not.

The COURT. What did he say?

Mr. FITZPATRICK. "The French have succeeded in considerably increasing the water-resistance of cellophane by the autoclave treatment used in making motion picture films."

The WITNESS. The autoclave process in making motion picture film was not a coating operation; it was a formaldehyde treatment, in which formaldehyde reacted with the cellulose.

8406 By Mr. FITZPATRICK.

Q. Again I ask you, had the French developed any nitrocellulose coating for cellophane?

A. I don't know.

Mr. GESELL. Do we have that number again on that? There seems to be some confusion at our table about it.

Mr. FITZPATRICK. 2009 is the number I have.

Mr. GESELL. You said Defendant's Exhibit?

Mr. FITZPATRICK. Defendant's Exhibit 2009.

Mr. GESELL. We don't go up that high. We don't have such a number.

Mr. FITZPATRICK. I must have the wrong number.

Mr. MINICUS. The defendants submitted two series of documents, your Honor, to us. They have submitted an exploratory series that had a great many documents, and then just before the trial they were able, as we were, to weed them down to a few documents. That is probably the old number. I think Mr. Fitzpatrick has the second number now. They had all sorts of numbers there, two or three of them.

Mr. GESELL. Apparently it is #393.

The COURT. So that I may understand, this writing to which you have just made reference is DX-393?

Mr. FITZPATRICK. 393.

By Mr. FITZPATRICK.

Q. How did you finally solve the problem of
8407 moistureproofing cellophane?

A. I didn't solve it.

Q. How did Dupont solve it?

A. By the method that I outlined to you just a moment ago.

Q. That method involved coating *coating* a composition which contained a wax, on plain cellophane; is that correct?

A. Yes.

Q. This coating composition had to be insoluble in water, did it not?

A. Yes.

Q. For it to be moistureproof?

A. Yes.

Q. And yet, to put it on the plain cellophane, you had to dissolve it; is that not true?

A. Yes.

Q. What way of accomplishing this did you ultimately choose?

A. Of accomplishing what?

Q. Of making a solution of the composition and then applying it to this plain cellophane. You could not dissolve the solution in water, could you?

A. No.

Q. The composition? So what did you choose?

A. A solvent.

8408 Q. In other words, you dissolved a composition containing a wax in a suitable solvent, that composition not being soluble in water, and then applied it to the cellophane; is that correct?

A. That's right.

Q. Are you familiar with a prior patent issued to a Mr. Reid?

A. Not offhand.

Q. I show you again Defendant's Exhibit 393 and ask you whether or not your reference there to the Reid patent rings a familiar note.

A. Yes, I remember something about this Eastman patent. Very vaguely, of course.

Q. Is it not true that he in that disclosure dissolved a composition containing a wax or a resin or a gum in an organic solvent, said composition not being soluble in water, and then applied it to cellophane?

A. The only word I see which indicates what you say is oleaginous.

Q. You don't remember the patent?

A. No. I remember vaguely that there was an Eastman patent.

Q. The composition which Dupont developed contained four constituents, did it not?

A. If you will name them, perhaps I can answer you.

8409 I am not quite sure that I can say that offhand.

Q. Wax, gum, plasticizer, and nitrocellulose base.

A. It sounds right.

Q. And when that was applied to the cellophane, to the plain cellophane, the original characteristics of the plain cellophane were retained and a new characteristic was added; is that correct?

A. Only partially true.

Q. In what respect?

A. Plain cellophane characteristics are not the same as those of moistureproof, aside from moistureproofing.

Q. Is it transparent?

A. Yes.

Q. Is it flexible?

A. Yes.

Q. Is it non-tacky?

A. Yes.

Q. Isn't it true, Dr. Benger, that when you entered the moistureproof cellophane problem the basic barrier which you had to surmount was to make plain celiophane moistureproof and yet retain those characteristics of clear transparency, flexibility, and non-tackiness?

A. Yes.

Q. And that problem, the idea of the problem, originated in the field and came to Dupont from complaints from customers?

8410 A. Yes. Customers and salesmen.

Q. Now isn't it true also, Dr. Benger, that compositions were known which when applied to plain cellophane would have made it moistureproof?

A. Compositions were known before we started this?

Q. Yes, sir.

A. No, sir.

Q. Is it not true that compositions——

A. Now wait a minute. Moistureproof and transparent. In these other problems that we spoke of, we had to retain transparency, as you have already pointed out.

Q. In other words, those compositions were known which would make it moistureproof but which would not permit the film to re[illegible]n its transparency?

A. I don't know. We would not have been interested if we had known.

Q. Do you remember a patent to Groves?

A. No.

Q. Do you remember that in 1933, when your laboratory applied the Groves composition to plain cellophane,——

A. I was not in cellophane in 1933.

Redirect examination by Mr. GESELL:

Q. Dr. Benger, you used the phrase "production line know-how."

8411 A. I think I was quoting somebody else.

Q. Perhaps you were. I guess Mr. Fitzpatrick used the phrase. And you said this was production line know-how. How important is production line know-how to the successful commercial manufacture of a product?

A. If you don't have that, you can't produce, obviously. That is a matter of definition of the words, it seems to me.

Q. Now you said that moistureproof cellophane was an improvement of plain cellophane. Did you mean by that to suggest that moistureproof was not a different product from plain cellophane?

A. The degree of improvement was great, if that is the question. Is that the question?

Mr. GESELL. That is the question. No other questions.

The COURT. You are excused, Mr. Benger.

Do you want to start to qualify your next witness?

Colloquy

Mr. GESELL. Your Honor, I thought perhaps since we have had two today I would take up a few odds and ends that are pending here between now and the adjournment time, so we can be cleared away for the next witness tomorrow morning.

The COURT. All right, proceed.

Mr. GESELL. The first has to do with a very significant

8412 concession on the part of the government, of which I wish to inform the Court and to clarify. It is a concession made by correspondence between counsel during the adjournment. Your Honor may recall that——

The COURT. Do you even take shots at one another after you leave here?

Mr. GESELL. Mr. Minicus is an impressive writer. I think that is why he is so far behind in some of his genuine preparation.

Mr. MINICUS. I object to that. There is no reason for a statement like that, your Honor. These statements do not originate with the government.

The COURT. Well, let us hear it.

Mr. GESELL. The concession to which I refer, your Honor, arises out of the early pre-trial in this case. An order was entered by Judge Holtzoff, some time back, in which he said that the plain-

tiff is directed to furnish defendant's counsel not later than May 31 with the names of competitors and potential competitors who are excluded by defendant from the field of manufacturing cellophane. Pursuant to that order we received advice from the government that one of the excluded competitors was the Skenandoah Rayon Company,—the only rayon company, I believe, listed. We informed the Court during the trial that because of that contention we intended to call Mr. H. K. Ferguson, of the St. Regis Paper Company, who was concerned with the transactions
8413 in issue. Now I have received from Mr. Minicus, under date of March 12, 1952, an amendment. He sent me this after he was formally advised that Mr. Ferguson was going to appear as a witness in this cause, and said that they were withdrawing the name of the Skenandoah Rayon Company, and accordingly, as I understand the notice, it is no longer contended that the Skenandoah Rayon Company was excluded from the manufacture and sale of cellophane, and your Honor's note should be changed accordingly.

Mr. MINICUS. Your Honor, the Court has a copy of all this. It is perfectly obvious what is going on. I think this is a stall for time, your Honor. Two years before we ever went to trial Judge Holtzoff asked us to name the people who we would contend had been excluded. We named about 18 names at that time. As the trial went on, although we felt that the Skenandoah Rayon Company, which was among the 18 had been excluded, we felt that our proof was not sufficiently concluded to put it in; so we put in no proof on the Skenandoah. We notified the defendant that we were not contending that we had proof that Skenandoah had been excluded, and we sent the Court a copy, and that is all there is to it.

We are trying to clean up the issues, and we are going to waste 15 minutes. We could have put that time in putting in the evidence.

Mr. GESELL. If he had kept his seat, he would have found something more to talk about.

8414 The COURT. Was that communication sent to you, Mr. Clerk, or to me?

Mr. GESELL. There is no record of its having been filed, your Honor.

Mr. MINICUS. There is a carbon copy of it marked right on his notice.

The CLERK. Yes, it is filed among the proceedings, and I handed it to the Court.

Mr. GESELL. Now there are two things about this, your Honor, which is the occasion of my bringing it up at this time. At Page 5003 of the transcript we introduced three documents. Mr. Minicus stated that he had no objection as to those documents. At the

same time, after he had said that, I stated, in response to his inquiry where they had come from, that they had come from Mr. Ferguson, and that we were calling Mr. Ferguson. Now I want to have it clear on the record one way or the other, whether it is the government's contention that they desire those documents authenticated. If they do, I will still have to bring Mr. Ferguson here to authenticate them.

Now the second question is a far more serious one. If your Honor will refer to this notice addressed to my firm with respect to Skenandoah, you will see that it states, "In this regard it
8415 is plaintiff's contention that the proof as ultimately adduced is probative of the exclusion of companies additional to those designated in the earlier listing."

I think the time must have come in this case, your Honor, when we are entitled, under the earlier order of Judge Holtzoff, to know the names of the companies which the government contends were excluded. They give us a name; we call a witness; they withdraw the name; and in withdrawing it, they send us a statement that of course they are going to contend that other people, whose names we have not got, were excluded. And they do that, your Honor, in spite of a letter to us over the signature of Mr. Herbert A. Ferguson dated January 30, 1950, which said that as additional names were determined we would be given them.

Before I call my witnesses with respect to the question of the exclusion of potential competitors, I believe I am entitled to know, under the earlier orders, and in the interest of an orderly trial, what companies the government is contending were excluded. That is my statement to your Honor, in the hope that we can straighten that out, before I turn to the next of the matters on my list.

The COURT. All right; what about it, Mr. Minicus?

Mr. MINICUS. I think, as far as the withdrawal of the Skenandoah name from the list of the 18 that I have mentioned is concerned our notice to the clerk of the Court and
8416 to the defendant speaks for itself. I don't think there is anything uncommon in such a procedure. Two years before trial we tried to appraise our proof as best we could at that time. In response to the direction——

The COURT. Is the concluding sentence simply a reservation on your part? How long are you going to keep this? When are you going to definitely tell Mr. Gesell what companies were excluded?

Mr. MINICUS. Our proof is in, your Honor, and the proof will show evidence addressed to every company on that list and its exclusion, except Skenandoah.

The COURT. Well, he is afraid that the meaning of that sentence is that you are not giving up your contentions.

Mr. MINICUS. There are two other companies, your Honor.

The COURT. You had better give them the names.

Mr. MINICUS. They are the Schnier Company and the Armstrong Company.

The COURT. Well, make it a matter of record; deliver him an official communication within one week from today.

Mr. MINICUS. We will, your Honor. I would like to point out in addition to this that the transcript is quite clear on the point. As we were putting in the Schnier and Armstrong agreements,
Mr. Roache incidentally pointed out a cause that we claimed
8417 was exclusionary of those companies, that was in the agreement.

The COURT. All right, I will pass that point. You are going to give them two names within a week.

Mr. MINICUS. That is fine, your Honor.

Mr. GESELL. I wonder what the government's position is going to be with respect to these three documents that Mr. Ferguson would be the authenticating witness on?

The COURT. Well, do we have Ferguson or not?

Mr. MINICUS. They are the defendant's documents. We are not claiming the exclusion of Skenandoah. If he wants to prove that Skenandoah was not excluded, that is all right; but we don't say they were.

Mr. GESELL. You have no objection to those documents?

Mr. MINICUS. I would like to have some time to look at those documents, your Honor, and reply in the morning.

Mr. GESELL. You stated at the time that you did not, and we have this man——

The COURT. All right; one of the men on your team can take time tonight to look them over.

Mr. MINICUS. Thank you, sir.

Mr. GESELL. Now the next matter, your Honor, has to do with a matter which was the subject of correspondence during the adjournment. Your Honor may recall that we submitted a list of the directors of the Dupont Cellophane Company, and the government took exception to the fact that the French represent-
atives were shown as listed as directors after the
8418 date that all of their stock was acquired by Dupont and they in turn took shares in Dupont. That appears at Page 5105 and 5106 of the transcript, and earlier at 5103. Your Honor directed that we produce and submit to the plaintiff a representative of typical minute. We did, and we sent copies of those to the Court under date of January 19, 1952. The question is now open whether with the submission of those lists, which show the appointment of the directors in question and their participa-

tion at the meetings in issue, whether there is any longer any pending basis for objection to Defendant's Exhibit 734.

The COURT. At the time the incident occurred I recall I heard both parties at length, and after I was in receipt of the writings from you I sat down and gave it consideration, and if counsel is ready I will make my ruling. The exception of the government is overruled and the documents may be utilized.

Have you anything further tonight?

Mr. GESELL. I can go on, your Honor.

The COURT. Well, I guess you can.

Mr. GESELL. That is the difficulty. Perhaps we should stop and take up again tomorrow. Whatever your Honor wishes.

Mr. MINICUS. Again, I repeat, I would like to point the situation out, we have covered two witnesses today;
8419 now I was not quick enough to remind your Honor, when we were discussing this matter of witnesses, that in the judicial conference recommendations there is a recommendation for the very thing we were arguing for today. If there were two witnesses today, there will be probably two tomorrow. We don't know who the fourth witness will be. We have only been notified of the three witnesses.

The COURT. Well, you were notified that there would be three today.

Mr. MINICUS. No; we were notified of three witnesses to cover the entire week in this week, your Honor.

Mr. GESELL. I will give him the next two. I don't have to.

Mr. MINICUS. Why can't they all be given and iron this out and save this continual wrangling?

The COURT. Well, give him two.

Mr. GESELL. The witnesses will be in this order, your Honor. Mr. Mitchell, Mr. McKeown, and Mr. R. R. Smith; and I informed the government now that they will take us through the end of next week.

The COURT. We will adjourn the court now till tomorrow morning at ten o'clock.

(At this point the trial was adjourned to Thursday, March 27, 1952, at ten o'clock a. m.)

8420 THURSDAY, MARCH 27, 1952, 10:00 O'CLOCK A. M.

Present: As before noted.

Mr. MINICUS. If your Honor please, at the close of yesterday, at Mr. Gesell's request, the Court directed the government to investigate and report upon the status of certain documents that had been introduced under defendant's case. If you recall, they were certain Ferguson documents, and Mr. Gesell wanted to know whether it would be necessary to bring in a witness to authenticate those documents.

The COURT. Yes.

Mr. MINICUS. During the course of that colloquy, Mr. Gesell made some disparaging remarks about the condition of the plaintiff's preparation. It was a strange remark, inasmuch as we have not been the one who has asked for lengthy continuance, and I thought we had been ready at all times. However, if Mr. Gesell in this instance had completed his preparation he would have observed that at Page 5054 the particular documents in question were admitted into evidence without qualification and without condition.

Now if Mr. Gesell is asking the government should he produce a witness to authenticate documents already in evidence, on a fact that is not in issue, I am afraid we do not have the answer.

8421 Mr. GESELL. You may strike Mr. Ferguson from the list. We will call Dr. Mitchell.

JAMES ALBERT MITCHELL, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

Mr. GESELL. If your Honor please, Dr. Mitchell is an employe of Dupont. He is a research chemist. He is presently stationed at the Richmond plant. Since 1931 he has worked on various phases of moistureproof cellophane research, seeking ways and means of improving quality, expanding uses, and reducing costs. Much of that research has resulted in patents involved in this case. It is our contention that Dupont's research was conducted for proper motives, and that the skill of its appliances and techniques in large part account for the company's position in cellophane, and that the patents developed from this research were properly sought and properly used. Dr. Mitchell will give evidence on these matters.

Mr. FITZPATRICK. If your Honor please, in view of the defense's characterization of the issue to which this witness's testimony will be directed, I wonder if the government might have permission to focus your Honor's attention on our permission as to this issue.

The COURT. Suppose you state it.

8422 Mr. FITZPATRICK. Yes, sir. Briefly, it is very simple, your Honor. This is their issue. It is not ours. We did not raise it. We are not trying to prove it. From the very, very beginning of this case the defense has made a constant and continual effort to focus attention on research alone, saying that the research was good and therefore nothing else is wrong with the company. Now we take no issue with the research alone. We take issue rather with the end uses to which that research has been put.

The COURT. I have your point. In other words, you say the utilization of what is good has resulted——

Mr. FITZPATRICK. In a harmful effect.

The COURT. In a harmful end. All right.

Mr. FITZPATRICK. And that in turn goes back and colors what was originally good.

By Mr. GESELL:

Q. Dr. Mitchell, will you state your full name?

A. James Albert Mitchell.

Q. Where did you receive your college and graduate training?

A. I received my training at the Johns Hopkins University, receiving my Bachelor of Science degree in 1927 and my Ph. D. in 1930.

Q. Are you a member of any professional societies?

A. Yes, I am a member of the American Chemical Society.

Q. Have you done any teaching in the field of chemistry?

8423 A. Yes; I was teaching for a period of one year, full time, prior to my employment with Dupont, in 1930 and 1931.

Q. Where did you teach?

By the COURT:

Q. Doctor, I have often wondered, what are the qualifications to become a member of the American Chemical Society? Because I heard yesterday of this astounding jump from 16,000 to 63,000, I believe, members.

A. Well, you have to be a person that is familiar with and trained in chemical science and have some standing in that business.

Q. Suppose I had graduated from M. I. T. this year. Could I become a member in the fall?

A. If you had a Bachelor's degree and had gained some experience in the chemical field, yes, you could, upon the recomendations of certain members in the Society, and if you were then investigated and accepted. Usually anyone that has taken as much as graduate training in chemistry is admitted without any further experience.

The COURT. Proceed.

8424 By Mr. GESELL:

Q. Where did you teach?

A. At the Johns Hopkins University.

Q. Was that your only employment after your Ph. D. before you came to Dupont?

A. Yes, it was, outside of work that I did during the summer months.

Q. Can you describe the various positions that you held in Dupont and the nature of your responsibilities?

A. I was first employed as a research chemist at Buffalo in the Cellophane Research Laboratory where I worked on moisture proof cellophane.

Q. When did you start off there?

A. That was 1931, and that carried through for a period of about six of seven years.

I was then a research supervisor in the Cellophane Research Section in charge of the work on moistureproof cellophane. After that I was Research Manager in the Cellophane Research Section where I directed about half the activities of the Section, which included the work on moistureproof cellophane; and just about two years ago I went to Richmond as Technical Superintendent of the Richmond cellophane plant where I have charge of the experimental work and research work that is conducted there on cellophane film and work that is related to quality con-
8425 trol and the anlysis of complaints and things of that nature that come back to the Richmond plant.

Q. Your entire experience has been as a research man and you have had no experience with sales or sales development or promotion?

A. Yes, that is right.

Q. Now, can you tell us in a general way how Dupont's cellophane research activities are presently organized?

A. Well, at the present time work that is related directly to the improvement in our product, improvements in our process and lowering cost, the major portion of that work, the short-range work, if we want to call it that, is conducted in technical sections that are located at the various cellophane plants.

The longer range, more exploratory type of work is conducted at the Cellophane Research Main Laboratory, the so-called Yerkes Technical Laboratory at Buffalo. They cover the longer range problems, some work on cellophane, and a great deal of their effort is directed toward new films.

The still longer range problems or more fundamental problems, some of those are carried on at the Chemical Department at the Experimental Station here in Wilmington.

We also have some work going on in the Pioneering Research Laboratory of the Textile Fibres Department.

Q. How many people would you say were engaged today
8426 on cellophane research?

A. Well, people who are directly concerned with cellophane research I would say probably about sixty to seventy; that is, those that are connected with work done at the plant laboratories or at the Cellophane Research Laboratory at Buffalo.

By the COURT:

Q. What do they seek?

A. Ways of improving the quality of cellophane film, ways of lowering cost, ways of developing and making new types of products, new films that will be of interest and use in the cellophane field.

Q. Could you give me an example of each of those goals that you are after? What would the physical end product be?

By Mr. GESELL:

Q. Take first of all quality.

By the COURT:

Q. Yes, let us take quality, Dr. Mitchell.

A. Work on quality improvement. Work on that has gone on through the years and, as near as I can judge, will always go on.

Q. Quality for what?

A. Quality of the uniformity of sheet flatness. That is a property that is very important in the printing trade. If the sheet is not flat and it droops at any portion then as
8427 it goes through a printing press, particularly these days where we do a great deal of multi-colored printing, the printing pattern is not uniform and overlaps and then you have wasted film. We have reached a point in our development where we have improved that quality over many years. But as we improve the quality the user finds—improves his process and becomes more critical, and that type of improvement I think will be required research and development all along——

By Mr. GESELL:

Q. Is work going on on that now?

A. Work along that line is going on in every plant technical group.

Q. Before we turn to these other factors could you give the Court another example of current work on quality?

A. Another very important quality problem is the improvement and uniformity of film thickness. We again have made tremendous strides during the years; but if there is any pronounced non-uniformity of film thickness we again have trouble with the handling of that material on automatic packaging machines and printing operations, and also we have difficulty actually winding up the rolls so we don't have hard spots where the film will stretch and be distorted and then cannot be used in printing operations. I say we have made tremendous improvements in that quality.

Q. Is working going on on that now?

8428 A. Work is going on along that line in every technical group in all plants.

Q. The next consideration you mentioned in response to the Court's question was cost, reduction of cost. What are you doing at the present time by way of example to reduce cost?

A. Well, we have continuous work going on in many phases of the cost problem. One of the problems we are working on at the Richmond plant is to reduce the cost of cellophane manufacture by reducing the amount of caustic that is necessary in the viscose to prepare a good solution of sodium xanthate. The caustic and the acid which is used to neutralize it is a wasted by-product in the cellophane process, and if we can lower the amount of caustic used in our systems then we will save a considerable amount of money.

So there is a problem that we are working on today to determine means, and we have two good leads along that line that are entirely new.

By the COURT:

Q. Do you know, Doctor, whether Olin and Sylvania are adopting the same procedure?

A. I don't know, but I presume they were. I don't see how you could undertake to support any product of this nature without having that kind of research.

8429 The COURT. Now I come back to Mr. Fitzpatrick's caveat earlier this morning. What is the purpose of this proof, Mr. Gesell?

Mr. GESELL. Your Honor, the Government says that Dupont's position in the cellophane business is the result of various restrictive practices. We say Dupont's position in the cellophane business is the direct result of its skill and successful development of the product by legitimate business means.

The COURT. Now the issue is sharly drawn. I see it. Proceed.

By Mr. GESELL:

Q. You also mentioned that you were also conducting research for the purpose of finding new and different types of cellophane for different uses?

A. Yes.

Q. Can you give us an example or two of that kind of work as it is now going on?

A. Work is being conducted at our laboratories—I can give a good example of that, I think, at a laboratory other than our own at Richmond. But most of the work that is going on now on this particular subject is being done either at the Buffalo laboratory or the Old Hickory plant, and there we are working on a new type of product that is made by coating film with a vinyldine chloride type polymer which gives a new type of property to cellophane film.

8430 The COURT. How did we miss the laboratory at Richmond?

Mr. GESELL. Your Honor, we went through the testing laboratories, but your Honor recalls that the work was done down at the little building at the foot of the hill and we did not walk down that hill.

The COURT. Near the James River.

Mr. GESELL. That is right. We pointed to it but I think we did not go down at the time.

The WITNESS. I might add that that particular development is one that has been worked on for quite a number of years. It is now in the stage where we are trying to push it through commercial application, and it required a tremendous amount of effort over the years and a tremendous amount of money.

By Mr. GESELL:

Q. What will be its use, Doctor?

A. Its use will be on products that require extremely high impermeability to gases, extremely high resistance to grease and other such products as that, and it has a property of not deteriorating under very adverse conditions of contamination.

8431 Q. You explained the general organization of the research facilities as they exist today. I would now like to take up the question as to how the research policy for cellophane is set, and how the various research objectives of these various people working on cost and policy and new types are determined. Can you give us an indication of how that policy is set and the objectives determined.

A. Well, the broad general policy of research is and has always been set by the head of the technical work in the company or the department, the head of the research section, and it has also been influenced, of course, by the policies that are laid down by the head of the film department or cellophane division, and it used to be.

Q. Well now, do other people——

A. The specific research objectives directed to specific problems, specific objectives, and problems that originate from a sales group, usually that comes to us through our technical sales section, or it might originate as a production problem at one of the plants, or it can originate in the research section as an idea from one of the research men or someone working in that group.

Q. Before the specific projects are determined upon, to what extent is there consultation on the various people participating in a responsible way in the research program?

8432 A. Well, there are some of our general problems that are considered completely desirable and laid down as proper objectives at any time. For example, the work I mentioned ear-

lier, on pull-out improvement, thickness improvement, they are recognized as needed improvements in the business, and work along those lines is supported and encouraged by our head supervision whenever we have any reasonable ideas, good ideas, for carrying that along. Anything that represents a new problem or a new development is usually discussed with people in sales and the head of our technical work and production management here at Wilmington before we proceed into those new lines.

Q. Have you over the years participated in the determination of these policies and objectives?

A. I personally have never participated in any definition of the very broad objectives. I have participated in formulating and establishing some of the more specific objectives of our work.

Q. What is the technical sales service and research section?

A. The technical sales group is the group that has contacts with the trade and our customers working from the sales division, and it is the group in sales that we are most closely associated with in our research and technical work. We look to the technical sales section to supply us information on the needs of the trade,
8433 the requirements of the trade. They point out to us places where the properties of cellophane need to be improved or should be improved, could be profitably improved. First they analyze and make their primary analysis on complaints and pass that information along to us. And we also tie in with them on handling the evaluation of new products. Any change that is made in our process, we always take the product made by that change and have it taken out into the field and tested and checked before we adopt it. And the same is true of new products. They take them and check into their application in the field.

Q. Now I want to come to the question of some of the major research developments that have taken place as to moistureproof film during the period that you have been concerned with that problem, and I would first like to talk for a moment about moistureproof film generally, cellophane moistureproof film, and ask how the qualities of moistureproof cellophane today compare with the moistureproof cellophane which was produced by Dupont back in 1931, when you joined the moistureproof cellophane project.

A. At the present time, moistureproof cellophane is characterized by, of course, being moistureproof; we have heat sealing, anchorage, properties which I can explain, if you like, a little later. We have good surface characteristics. The surface of the film is slick, so that it operates well on high speed automatic
8434 packaging machinery. The film is non-blocking. That is, it will not stick together and mat or mar when it is pressed together in roll form or under any form of pressure. The film is non-toxic, and transparent, odorless, essentially tasteless.

Q. Now you have described these various qualities, and what I want is a comparison as they exist today, and let us take them up one at a time. In 1931 could you seal moisturepuroof cellophane by heat sealing?

A. No, we had no heat sealing cellophane at that time. Heat sealing in the sense that we use the term today.

Q. How does it seal today?

A. Well, to make a comparison with figures, we usually run heat sealing tests by taking a strip of film and superimposing one film on top of the other and sealing the film together under controlled conditions of pressure and temperature, and then determining the force necessary to peel and pull that strip apart. The film we made in 1931, by the test that we usually use, will register zero on our equipment; our testing equipment, for heat sealing. The film that we make today will have a pull-seal strength, for a one inch strip, of anywhere from a quarter to one pound. So we have gone from what we measure as nothing up to a quarter of a pound or one pound on a strip.

Q. You also mentioned anchorage, and said you could explain what that is. Could you give us a brief indication of what the anchorage——

8435 By the COURT:

Q. Heat sealing, to make a homely illustration, is when my good wife puts a pork chop in an envelope of cellophane and takes a hot iron and then puts it in the cooler; is that it?

A. That is exactly right.

Mr. GESELL. The end of a loaf of bread, your Honor.

By Mr. GESELL.

Q. Now, anchorage.

A. In 1931 when I first came with the company, we had no anchored film. Anchorage is the resistance of the coating to slipping off or coming off when the film is immersed in water.

Q. In other words, in 1931 when the film was immersed in water the coating would come off?

A. The coating would come off in a matter of a few hours. And now with our anchored film we can immerse the film in water and the coating will remain intact for a matter of days or more than a week.

Q. You mentioned surface characteristics, Dr. Mitchell, in referring to the fact that in cellophane now one piece slips over another very easily?

A. Yes.

Q. What is the comparison as to 1931 there?

A. Well, since 1931 we have made what I consider a
8436 tremendous improvement in the surface characteristics of

cellophane film. At that time the film was moistureproof, transparent, and although it would not block together, that is, it would not stick together when you ran it up in a roll form, the film surface would not slip readily one over another, and under very high pressure conditions, or long term storage, particularly at elevated temperatures, where a storage room might get on the hot side, the surface of the film would be very badly marred. Now that type of film will not operate at any reasonable speed on automatic packaging equipment, and a great deal of our research effort has been put into making the surface characteristics of that film better.

Now we have reduced the frictional drag on the film, when one surface slides over another, or when one surface slides over a metal part of a wrapping machine, by probably a factor, I would say, of at least three; and, in qualitative terms, in the kind of press we use in our plant to see whether our film has the right kind of surface characteristics or not, rubbing one surface of film over another, with the film we made in 1933, when we pressed two pieces of film together, even under very light pressure, the two surfaces would not slip; now the film that we have will slip even under very high pressure, you can easily slip one surface over the other.

Q. I believe you also mentioned odor. Has there been
8437 a shift in that since 1931?

A. There has been some minor improvement along that line, yes. I think cellophane always has been characterized as being a material of relatively low odor, but we have made some improvements in odor over these years by decreasing the amount of odor that is present in the ingredients we use in the coating compositions. For example, the plasticizers we use today are of a very low degree of odor. When we started using one of our plasticizers, dibutyl phthalak in one of our coating formulas, there was not an odorless type on the market. We have made improvements in the odor of the resins we used in the coating. They have been the points of chief improvement.

Q. At the time you went to work in 1931, how many different types of moistureproof film were there made by Dupont?

A. When I went to work in 1931, there was just one type of moistureproof film, the so-called moistureproof transparent film, cellophane.

Q. M. T. cellophane.

A. M. T. cellophane.

Q. How many types of moistureproof film does Dupont make today?

A. Well, they make quite a variety of moistureproof film today. Actually, if you look at our sales list of the number of types
8438 and varieties of cellophane that we have to sell, I believe

there are probably about 80 different varieties of cellophane today.

By the COURT:

Q. Let me ask you a question on that, Doctor. Would the Richmond plant, for example, be equipped to make those 80 varieties, or does each plant have a separate species?

A. Each plant has a separate species, although there is a great deal of overlapping. Now one type of film that we make, our so-called L. S. A. T. type, I think all of that at present is made either at Richmond or Clinton.

The COURT. When we were in Richmond there was what? Eight machines?

Mr. GESELL. Sixteen machines.

By the COURT:

Q. Sixteen machines?

A. Yes.

Q. You would run Type A through Machine No. 1, if you wanted to run Type B would that go through the same machine?

A. Yes, it can. And we try to make as few machine changes as possible.

Q. Now tell me how that operates.

Mr. GESELL. What you do when you have to shift the machine from one type to the other is what his Honor has in mind.

8439 A. At the Richmond plant,—let me first explain how the coating is handled,—we actually make about five different varieties of coating composition. Now some of the plants don't make quite that number, I think. I guess we do probably make perhaps six types. Some of them not too much. But they are the variations we can put in the coating. Then on the casting machine we may make variations in thickness and sulfur content. And on the anchorage treatment, when we coat the film. Now if we are making a change in thickness, that adjustment then is made back into the hopper at the time we change that production type. Some of our machines we may change as much as three times within 24 hours. As I say, we try to keep that down to a minimum.

By Mr. GESELL:

Q. For thickness?

A. For thickness or some other reason. Now if we want to change the softener content, we change the concentration of softener in the softening bath on the casting machine, and get that variation. Now we can take any one of those types of cast film and coat it with a different coating composition, to get five different varieties. If we want a thicker film, for stronger purposes, we

will then get another whole series of films. So you see if you have five or six coating combinations and a wide variety of test sheets, some of which vary in thickness, anchorage treatment, and so on, you can get a wide variety of product.

8440 Q. What were the reasons for the development of these types of films?

A. All of these films were developed on the basis of anticipated or expected markets for those films. It was generally recognized, I think, very early in the cellophane business,—at least that policy was well established by the time I came with the company, that heat sealing film and anchored film would be very desirable films to have in the trade, to open up new markets and expand markets. As we have gone along in the cellophane business, we have seen opportunities for developing films for very specific uses, and then we have gone ahead with developments for that purpose.

Q. Now I want to come to the moistureproof coating. I guess there are more cellophane patents on moistureproof coatings today than any other part of the moistureproof art; isn't that right?

A. I think that is probably right.

Q. What research work was going on or progress at Buffalo on moistureproof coatings when you arrived there?

A. When I arrived at Buffalo, of course, there was a very small group of people then in the cellophane research group, probably about six people. Two of the people in that group when I arrived were working on problems relating to moistureproof cellophane, and there was some work going on on anchorage at that

8441 time. And the work then was concerned, so far as I can remember, entirely with improvements in quality and improvements in cost.

8442 Q. What was your first assignment?

A. The first assignment I had was to improve the moistureproofness of cellophane film. At that time we believed it would be very advantageous and desirable to improve the moistureproofness of our product. Before I came with the Company the film had been introduced to the cigarette trade and we were anxious to improve the moistureproofness particularly for that application, so I was given a job of improving the moistureproofness of cellophane film by research work on coatings.

Q. What facilities were available to you at that time for working in this field of moistureproof coatings?

A. Well, at that time the work that was being conducted in the research group I think quite naturally I fell into the pattern of doing the same thing. We had a very limited amount of laboratory equipment with which to conduct the experimental work. The usual course of the work was to make substitutions for one

of the ingredients in our coating composition with various concentrations and conduct some experiments in the laboratory by dipping some small samples of film through a lacquer in a small pan, scraping off the excess with glass rods and drying them in the oven.

Based on the results we obtained from that we made some experimentation in the plant in an attempt to prove the process.

8443 The first work I was doing, the first lead line I was taking to attack the problem was to substitute various types of waxes in the moistureproof coatings in an effort to improve the moistureproofness.

Q. Was there any organized program for developing the proper moistureproof coatings in operation then?

A. Well, I would say, and this is probably a personal opinion, too—there was no program organized in a good manner for attacking the problem at that time.

Q. Did you make some recommendations to anyone at that time as to what should be done?

A. Yes, I did. I had not been with the Company, of course, very long when I could see that the way I was attacking the problem, at least, and the usual way we were going after this thing we weren't getting very far. I found in trying to translate the results that I obtained by laboratory methods into the plant I was not getting anywhere; the work was really a failure. We had a small mixer for making up a couple of hundred pounds of lacquer, and when we wanted to conduct plant experiments we made up a couple of hundred pounds of lacquer bath and dumped it through a coating tower, and on that type of operation we were able to make a few experiments a day, and I found that the conclusions I was trying—my results were not reliable.

8444 I remember quite distinctly one time when I was coming back to the laboratory and feeling pretty discouraged about things—in fact, I was feeling so discouraged then that I was seriously considering leaving Dupont—my supervisor Bill Hines asked me how things were going, and I told him they were not going well at all; and he wanted to know why; and I said because of the way we were attacking this problem, and I suggested what I ought to be doing was to spend more time in the laboratory trying to get some fundamental information on what moistureproofing lacquers were really like.

At that time our knowledge was about in this condition: We knew that in general we had a certain—we had four primary solid components in our lacquer. We knew that the wax was the moistureproofing agent. We had begun to suspicion that the

plasticizer had a very important role in promoting the moisture-proofness, and that is about all that we knew. It seemed to me that we ought to get into the problem by attacking it in a more fundamental way, finding out the characteristics of the functions of each of the ingredients in the coating by varying the chemical constitution, and so on, and we could lay down some principles on which to base a good formulation and improvement in coating compositions.

Q. What happened as a result of your recommendations?

A. Well, I remember Bill Hines didn't say much when I first suggested that. At least I felt I had gotten that off my chest.

8445 He came back the next day and asked me again what I said yesterday I would like to do, so I told him again. He said, "Well, you just go rigift ahead and do that."

Q. That set you off on investigating moistureproof coatings?

A. That is right, and that was the birth, if you want to put it that way, of what we called for a number of years our work on the systematic study of moistureproofing lacquers.

Q. What was the purpose of that work as you originated it and undertook it?

A. The purpose of that work was to develop a sound background of information on the function of every ingredient in the coating, both solids and solvents, to find out how the properties of those coatings could be varied in any of the desirable characteristics such as moistureproofness, and later we added heat sealing. Those are the various properties that are important in the film.

Then also in the course of that work to develop sound laboratory techniques for studying moistureproofing lacquers on a laboratory scale.

Q. How long were you on that work?

A. After I started on that work I don't believe I went out to the plant to run another experiment for a period of about two years. I worked on that type of work on cellophane for a

8446 period of I would say about four years and on and off in the later periods, perhaps five years.

Q. Why were you doing it?

A. We were laying down principles on which to formulate lacquers to give desired characteristics so that we could make sound improvements in properties of our coated film so that we could take the results of laboratory work and translate them into actual plant practice with a minimum of effort and minimum of trial.

Q. How many patents were issued on the basis of the research of this kind and other research in which you participated directly or indirectly and supervised?

A. During the course of time that I worked on moistureproof cellophane in either a direct capacity or supervisory capacity I believe there were about forty patents in which I have been connected.

Q. Can you give us briefly what the subject matter of those patents is by groups?

A. About thirty of these patents were concerned with moistureproofing, about seven patents were concerned with anchorage, and about three patents were concerned with adhesives.

Q. How many of those patents were used in Dupont's actual commercial cellophane production?

A. Thirteen of those patents were used in commercial cellophane production.

8447 Q. Can you give us, Dr. Mitchell, some of the reasons why the other patents were not used?

A. Well, I think there are a number of reasons why the patents were not used. First of all, we have the situation of commercial availability.

Q. What do you mean by commercial availability?

A. Most of our patent applications which incidentally just originated on suggestions from myself—or in case any other research man was involved from him—most of those were based on preliminary laboratory work where we developed a principle and a new composition matter, and we would proceed if we thought that looked like a very useful type of material in our cellophane business, and if it was invention we would apply for a patent.

Some of the materials that we had were at times laboratory curiosities. I can recall we have several patents on long chain aryl amides. At the time we worked on those materials none of them to my knowledge were commercially available. Since that time one of them has become commercially available, diphenyl lauramide.

By the COURT:

Q. What is the definition of not being commercially available?

A. If you can buy it in sufficient quantity. I guess the

8448 best way to define it is if you could buy it in sufficient quantity for the use or application that you had in industry.

By Mr. GESELL:

Q. You mean buy one of the raw materials or ingredients for the coating; is that what you are talking about?

A. Yes, that is right, as one of the ingredients of the coating. For example, in the case of this particular plasticizer you could go to Eastman Kodak Company and buy a few hundred grams, but no one was manufacturing it in quantity to make moistureproof cellophane.

Q. You say one of those has now recently become available?

A. One has now recently become available, yes, but the price is so high that it is not economically attractive. It would make the cost of cellophane so much higher that we are not interested. If that ever becomes lower in price I think we would be interested in it.

By the COURT:

Q. The point I am interested in is if it was available it would work as a coating; is that right?

A. Yes, that is right.

Q. And it would be an advance in the art?

A. Yes. Of course, there are always some other considerations which I will speak upon here a little bit later in answering this question, depending on whether you will
8449 use the thing. In some of our other patents—

By Mr. GESELL:

Q. You mentioned one of the factors why you didn't use them. What were some of the others?

A. Commercial availability, high cost, then another instance where we in attempting to develop a process for making film using such—say, for example, a new composition of matter and we have run into operating problems or difficulties which would prevent our using them commercially. I can think of a few, perhaps, along that line.

Q. Give us an example of that; that is, when you go from the laboratory to the commercial practice?

A. That is right. We spent several years in the cellophane research section working on what we considered a very hot idea, and we still think it is—materials that we call solvent soluble slip agents, in order to get this surface characteristic I talked about earlier, and we developed a process for adding an inert ingredient to our coating lacquer which would give a very minutely or microscopically rough surface. That is what makes it slippery. That process has some very obvious disadvantages. This inert material that is added to the lacquer tends to settle out, so we have to keep the lacquer coating bath agitated and we had quite a problem in maintaining the coating in the desired range. We found in the laboratory we could take certain types of materials, these
8450 agents, and disperse them in our lacquer bath and have a completely homogeneous system, coat them on to our film and end up with a coating which was slippery and had a good surface. When we attempted to put that process in the plant, as I say, we worked on it for quite a number of years and put quite a lot of effort into developing the process, we found that we were having conditions which interfered with the proper performance

of the slip agent. Changes in temperature of the bath that are normal experience in operation would precipitate or affect the solubility of this material, and more importantly variations in the solvent composition which are in the normal range of experience and as close as we could operate in a manufacturing operation of that kind would affect the solubility. Worst of all, as the cellophane came through the coating bath it would pick up a certain amount of water from the film, an unforeseen condition that would precipitate out the slip agent prematurely. So we lost all control of it and we had no control over the process and we abandoned it.

Q. So while you got a good slip agent you took out patents at the laboratory stage and then you found you could not reduce it to commercial practice?

A. That is right.

Q. You also mentioned high cost as one of the factors which prevented the use of some development. Can you give us an example as to high cost?

8451 A. Yes, I think this diphenyl lauramide plasticizer which I mentioned earlier was an instance that when it became available it was so high in cost that we were not able to use it.

Q. Are there any others you can mention?

A. I can't recall any others offhand. Yes, I can think of another one. We have a patent on compositional matter containing butyl methycrolate polymer. That material is so expensive that we can't make a coating composition which offers us enough improvement in properties to warrant the increase in cost.

Q. In addition to commercial availability, disadvantages on a commercial scale, and high cost can you think of any other factor that has affected this?

A. Another thing that we have experienced is what I might describe as obsolescence of the invention before you ever use it.

Q. What do you mean by that?

A. By the time we develop a process or get to the point where we have a process that we can use, before we get to that point another development has supplanted it.

In the patents that I mentioned earlier there are quite a number on rubber derivative coating compositions. I think that is an excellent example. All told I would guess there are probably five to eight patents out of that forty.

8452 By the COURT.

Q. You mean the advance in the art is that rapid?

A. Yes. I will explain just how this happened.

Q. Yes.

A. The war interfered a little bit here, but we were very seriously interested as a result of our work on rubber derivative

coating compositions. They offered us better moisture protection than anything we were then using. We worked with chlorinated rubber, cyclicized rubber compositions. We actually developed a chlorinated rubber composition and put it into commercial use at the Clinton plant shortly before the second World War, and we had to go out of that business when the war came along because of the demand for rubber. We had been working on compositions containing cyclicized rubber, because they gave us, as I say, good heat sealing properties and better moisture protection than anything we were then making.

When the war came along we had to abandon all intention, of course, of making a rubber derivative coating because it was needed for war purposes, so we stopped our work on rubber derivative coatings. Just before that time, though, we had started work on another type of composition based upon a vinyldine chloride polymer, and that development was carried along on a research basis through the war years. It proved to be so much
8453 superior to the rubber derivative coatings that we abandoned it completely and have abandoned completely at the present time our intentions of going ahead with rubber derivative coatings.

By Mr. GESELL.

Q. And you are making this other type that you have developed?

A. That is right.

Q. Dr. Mitchell, can you tell us who decided whether or not to apply for patents on your work?

A. Well, the decision of whether to apply was always made by the head of our Patent Service Section, the head of our Technical Division, who always approved the filing of patent applications.

Q. How did he learn of developments which might be made the subject of patents?

A. Well, it was always left up to the research man involved to make a patent proposal. I don't remember anyone ever telling me. I used to sit down and scrutinize my work every six months, and I know that often the supervisor might suggest to his men "Isn't that a subject for a patent proposal?" But the patent proposals originated with the research man doing the work.

Q. If they thought they had something they kicked it up?

A. That is right. He would prepare a patent proposal where he would indicate the nature of the suspected inven-
8454 tion and how it originated and what it was all about and give examples, and that would be turned over to our Patent Service Section as a proposal or suggestion.

Q. Then you say the Patent Service Section would determine whether or not to file a patent application?

A. That is right.

Q. I suppose you made many such proposals yourself?

A. Yes.

Q. On your own work?

A. Yes, that is right.

Q. Did you ever propose or make a proposal for a patent on something you had not actually operated and proven was useful and would work?

A. No, I never proposed a patent that I had not reduced to practice in the laboratory.

Q. Were all your proposals accepted? Did they result in patents?

A. No, not by any means.

Q. What proportion of them would you say were not made the subject of an actual application for a patent?

A. I would not know exactly. I never kept any record. But I would guess probably at least half the ones that I proposed were never accepted.

By the COURT.

Q. Who exercised the power as to whether an applica-
8455 tion should be made or not?

A. The head of the Technical Division, and I think he was the one who had the primary responsibility. Of course, the head of our Patent Section would also do that.

Q. What would be the head of the Technical Division's title?

A. The gentleman you saw in the chair here yesterday, Dr. Benger, he was the head of technical work in the Rayon Department for many years. Of course, he acted upon, I think, very often the advice of the Directors of the Cellophane Research Section who had a large part in advising on what should be filed and what should be not.

Q. You mean the Board of Directors?

A. No.

Q. I want to know the top echelon, who says we get a patent or we don't?

A. I may be wrong in this and I think you would have to check with someone else. I think it has always been left to the responsibility of the head of the Technical Division.

Q. That is an individual?

A. Yes. It is his responsibility to see that we file or don't file for a patent application. As I say, I am sure he must act upon the advice of people in his organization who were directly con-
cerned with directing the work of that section. Dr. Benger,
8456 for example, was head of the Technical Division and directed the activities of the research on fibres and films.

By Mr. GESELL:

Q. The man in that research position would work with the head of the Patent Service Section?

A. That is right.

Q. And the head of the Patent Service Section in turn reports to the Patent Board; isn't that right?

Mr. MINICUS. May I ask whose testimony this is?

Mr. GESELL. This is mine, Mr. Minicus, in the effort to help the Court.

The COURT. I am asking for information.

Mr. MINICUS. I understand, sir.

The COURT. I am trying to find who has the final say.

You have used the phrase the Patent Board. What is the Patent Board?

Mr. GESELL. I should first remark that Mr. W. W. Smith is on the list of witnesses to give information in respect of this very matter that your Honor has asked about, and my leading questions were simply to fill in the chinks until he got here.

The COURT. All right. We will wait for Mr. Smith.

Mr. GESELL. He is a member of the Patent Board and he is head of the Patent Service Section, and he will describe
8457 what was done with these proposals as they came up from the research side of the work.

The COURT. Very well. I will be patient.

Mr. GESELL. We have to do this by sections.

By Mr. GESELL:

Q. Well, now, what was your purpose, Dr. Mitchell, and the purpose of your associates in this research work, so far as you know it, in submitting proposals for patent applications of the kind you have described?

A. As a research man I felt I had a real responsibility in seeing to it that we kept ahead of competition in cost and quality, and insofar as we could obtain an advantage by patenting any of our improvements or inventions or new ideas it would enable us to take advantage of that to keep a lead on—keep ahead of competition.

I think a second reason that is of tremendous importance to us and has always been of tremendous importance to us is it enables us to avoid getting into a position of disadvantage competition-wise. We have always scrutinized very carefully new changes, changes in operations or new processes that went into operation, new products that went into production for patentable features for defensive purposes so that we would not be restricted in the future from carrying on that development or producing that film

to the extent of having someone else come along and patent
8458 the same thing and prevent our doing it or having the disadvantage of paying a royalty for the purpose of carrying on that work.

Q. Did you ever make application for a patent knowing that you would never have occasion or Dupont would not have occasion to use that patent?

A. I have never made application for any patent that I did not have a hope that some day it would be used.

Q. Do you recall ever in your experience being directed by anyone or yourself undertaking to scrutinize some patented feature that a competitor had in this flexible packaging field and then purposely setting out and building up a block of patents and developments around that other fellow's invention so that he could not practice it or so that he would be limited in the practice of it?

A. No, never.

The COURT. Is that what was referred to as fencing?

Mr. GESELL. Blocking. As I understand it, that is blocking, your Honor.

The COURT. What is the fencing thing?

Mr. GESELL. That is my next question.

The COURT. All right.

By Mr. GESELL:

Q. Did you in your experience yourself or at the direction of anyone else ever undertake to build a fence, so to speak, on
8459 either side of your process pushed out away from what you were actually practicing for the purpose of preventing anyone from coming in and encroaching on your process or its alternatives?

A. No. We always undertook our objectives or research work man's objectives on improvement in quality or cost, and although it was recognized that patents were an advantage, they were considered a by-product of the work. I know we have never undertaken work for the purpose of getting patents.

Q. Now I want to come, Dr. Mitchell, to anchored film.

Mr. GESELL. Your Honor, we might take a mid-morning recess at this point.

The COURT. All right. Recess for ten minutes.

(At this point a brief recess was taken.)

8460 By Mr. GESELL:

Q. Dr. Mitchell, I now want to take up anchored film. You have already described what it is and the progress that was made through Dupont research from 1931 to the present time. How important is anchorage film in the company's current business?

A. Qualitatively, it is of tremendous importance in the present company's business. There are a large number of applications where the film is used, under conditions of high humidity or weather conditions.

Q. What are some of those uses?

A. Such as packaging of fresh vegetables, packaging of fresh meats, and things of that nature. Chiefly food stuffs, cheeses, and things of that kind.

Q. Do you recall back in 1931 what the needs were that led to this work on anchorage film?

A. The work on anchorage had actually started before I came with the company in 1931, but I think I am right in saying that the need and desirability of having an anchored film was quite obvious. The first commercial moistureproof film we quickly found out would loosen the coating, the coating would loosen from it, if you exposed it to moisture conditions. And in attempts to introduce, as I recall the situation, in those early days, foods like fish or any wet goods, the coating would just
8461 slough right off, and they never could be used.

Q. Did you participate, and, if so, to what extent in the research work that was carried on on anchored film, either directly or in a supervisory capacity?

A. I did not participate directly in any of the early work with anchored film. I was rather closely associated with that during my early days with the company, because I had people working in the same laboratory with me that worked on anchorage and I am fairly familiar with what the development was. In my later career, when I was supervising research work, I did have some anchorage work, and have been directly participating in the anchorage work for the past, oh, five or ten years.

Q. Can you, by way of example, having in mind the question of the Court with respect to the changes and advancing nature of this cellophane art, describe the early work that was done on anchored film and then the course of the later research and the results achieved?

A. The very early work on anchored film, was, of course, exploratory in nature, in the laboratory. I don't know offhand the exact date when some of the work was started, but I would guess it would be a couple of years before I came. But in talking with the men that worked on that, and looking at the reports on the subject, the early work that was done on compositions, such
8462 as casein derivatives or rubber derivative coatings, gelatin derivatives, in an attempt to treat the film so that the coating would adhere tenaciously under wet conditions.

Now all of those things gave some improvement, and I think most of them were actually the subject of a patent. They never

were good enough to use. That is, they never had a degree of improvement that was considered good enough to be used when we came to development further. The first successful anchorage process was just being carried from the laboratory to the plant at about the time I came. This process was based on a perilla oil blyptal resin, which was applied to the film from a solution, cured on the film, all the coating operation, and then a top coat of moistureproof lacquer was applied on top of that.

That film actually went into commercial operation and is also, I believe, covered by a patent. That film never grew very much. It was a very expensive film. The operation was very slow in speed. We had tremendous waste in the process, because between the first coating and the second coating operation we had tremendous blocking, sticking, difficulties, and high waste of film, and the film was also characterized by a very slight odor, which made it objectionable for some uses.

But that got us started in the anchored film business. The
8463 research work was carried on on anchorage quite extensively to develop a better process, and the next stage in the development was the introduction of a process that was applied—of material that was applied on the casting machine, a polymeric material that would be obtained from shrimp shells and crab shells. In fact, a small plant for the purpose of extracting this material from shrimp shells was built out here at Wilmington the banks of the Brandywine, and the material was manufactured there for us for all the time we used it.

This material was solubilized by converting it to a chemical derivative, applied on the casting machine, and then that was coated. That was quite a step forward in anchorage. The film was cheaper to make. We got rid of some of the odor difficulties. Although it was still rather expensive, because the speed of operation was slow, and it had one serious quality defect, in that it had poor anchorage under acid conditions. If you would package material like strawberries in that film, it would not stay anchored, the coating would not stay anchored.

So we went ahead with further work on anchorage improvement. The next step in anchorage improvement was the introduction of a process which went back to double coating. A new type of urea-formaldehyde resin came on the market which was soluble in organic solvents, and we developed a process for curing this resin on our film very rapidly.

8464 By the COURT:

Q. Doing what?

A. Curing. Polymerizing. Setting it up very rapidly. See, that is the secret of so much of this anchoring, is developing a

chemical process that is rapid enough, fast enough. That process was developed from that idea over a period of several years and placed in operation, and because, even though it was a double coating operation, because we could do it rapidly, we could manufacture it at a lower cost than we did our shrimp shell material process, and it also had better anchorage under acid conditions. We finally had what we considered a top quality anchored film.

Q. Your operations call for three 8-hour shifts?

A. Yes.

Q. What is the work day of your research department?

A. Normally, eight hours a day.

Q. What is it in fact?

A. Well, I don't think many of us work—I think we most probably average somewhere between 10 or 12 hours, I suppose.

Q. Do you get overtime?

A. No. Sometimes we work two shifts in a row. But that is considered part of our duties.

We finally had a really tough quality film, but again we had to invest in high cost equipment, two coating towers to make
8465 one row of film, and it was relatively costly over what we could visualize if we got a cheaper process that we could apply an anchorage treatment on the casting machine.

So the work was continued on anchorage, and when the Second World War came along we were right in the middle of a new process that used a melamin formaldehyde resin which could be applied on the casting machine and cured in the casting machine dryer.

The need for anchored film became quite acute during the war, material obligations particularly called for anchored film, and we put a tremendous push into getting that process into operation. We put it into operation during the war, and it soon became the major part of our production of anchored film. Then work was further continued because we ran into certain operating problems with that material. This resin was added on the casting machine and the bath that we used it in developed a lot of foam and precipitated a scum that would interfere with the appearance of the film. The process was very hard to control, because slight variations of temperature and the age of the bath would affect the efficiency of the resin.

So we worked on new anchorage systems, and finally came across—this was a resin that we picked up on the market, a urea-formaldehyde resin, which was easier to handle in the plant and it gave us about the same quality level, and it gave us better
8466 efficiency. And then in further research work to improve our position there, we undertook work to synthesize the resin for anchorage purposes, and the resin we use today is one

that was developed in our own research section specifically for the purpose of producing an anchored film.

By Mr. GESELL:

Q. Now all of these changes and progress in this part of the art occurred over what period of years?

A. That occurred from, I would guess, 1929, I would say; it was some time prior to my coming with the company in 1931, up to the present day. We are still working on anchorage improvement.

Q. How did those developments in anchored film affect the sale and uses of cellophane?

A. Well, I have no figures to give, but I do know that it has had a tremendous influence on our business, because it has opened up outlets for packaging wet goods, getting in the fresh vegetable packaging field, the packaging of meats, have all been the result of producing an anchored film.

Q. Now I suppose, as in fact you have indicated, that there were various patents issued as the result of this progressive work?

A. Yes.

Q. Were all those patents used?

A. Well, no, all of the patents were not used. I can't re-
8467 call any patents that have issued in our recent years—I mean by that the last ten years—have not been used. Some of the work that was in the exploratory or laboratory stage, where we were developing ideas and getting new things out, in the efforts we were making to where we could evaluate them in terms of providing plant processes, have never been used.

Q. Why weren't they used?

A. Well, because either in carrying them forward to a plant development stage some deficiency became evident,—either they didn't have a high enough level of anchorage property—in one instance I can recall of a patent of my own on anchorage which was based on the use of a new synthetic drying oil; I don't believe that ever got beyond the laboratory stage of development as to the production of the oil, so the material was never commercially available. I would guess that by the time that could have been done these other developments would have made it obsolete.

Q. Generally speaking, in this field that we are talking about, moistureproof coating and anchoring, and so forth, how long does it take between the time of the conception of the invention and the reduction of that invention to commercial practice in the plant?

A. Well, I don't think I could give you any definite stated time. It depends a lot on the problem and how fortunate you are in arriving at a solution. I can say that in working on a prob-
8468 lem like developing heat sealing film, it took from three to five years, I believe would be right, in developing that film.

Anchored film took at least that long. And some of the more specific problems would take perhaps a little less to solve. It depends pretty much on the amount of background information we have. Some of the problems are easier to solve now than they were ten or twenty years ago, but because we have more information. During the war, based on the background of all the information we had accumulated on moistureproofing systems, we were able to make changes in moistureproofing formulas almost overnight, just based on the knowledge that we had.

Q. Why did you want to make those changes in formula?

A. Well, to keep up with the availability of raw materials. During the war we couldn't get enough of material of the type we were then using to make the film that was needed. And we made changes, a large number of changes, during the war.

Q. Now, turning to sealing, you have described the progress made in that field by your pulling tests that you described. Was there research work done in the development of these heat sealing properties?

A. Yes, there was of course a lot of effort put in heat sealing, because that too was recognized early as a very desirable property.

Q. Why was it considered desirable?

8469 A. Cellophane was then sealed, in the early days, by the application of glues or adhesives. I believe Dr. Benger mentioned yesterday that we had to develop adhesives in our laboratory for sealing the early moistureproof cellophane. This solvent sealing was developed as a means of sealing film, but both of those had disadvantages in that they contributed odor to the package, and they are also slow, slow in setting up, so that in order to get into high speed packaging operations with automatic machinery and to get a product that was good in behavior and a package that was not troubled with odor, and so on, heat sealing was just the obviously good answer.

Q. What did you have to do with the heat sealing research, if anything?

A. Well, the very early work, I was only an observer, although I soon got into the picture, shortly after I came with the company. To the best of my knowledge, the first research program, research work, undertaken on sealing film, was done in the fabrics and finishes department. They supplied at that time a large number of the ingredients we used in moistureproofing cellophane, and they used to keep a program active to assist in cellophane problems. They tackled the problem along the line of adding a thermoplastic resin to a moistureproofing lacquer to make it heat sealable.

Compositions were developed that had such properties and a good degree of heat sealing, but we never used them

8470 commercially because they were always either too tacky, too soft and tacky, or they had odor. We didn't develop a successful, a good heat sealing film, until it was discovered that by a certain combination of plasticizer and nitrocellulose in a moistureproofing lacquer, a certain type of plasticizer, and a certain type of nitrocellulose, that we could get heat sealing effects in the absence of any soft thermoplastic resin.

8471 Q. How much work was done on the subsequent development of this?

A. Well, heat sealing has gone on down through the years for quite a number of years. The first film we introduced was rather soft and tacky. Although it was acceptable, we have recently done away with it. We continued work then to improve the surface characteristics of our heat sealing film, and discovered a certain type of plasticizer which would give a hard, non-tacky film at room temperature, yet when heated up under heat sealing conditions would dissolve the nitrocellulose and give a heat seal. That was the big step in making top quality heat sealing film.

Q. When was that step achieved?

A. That was about 1934, as I recall.

Q. And then what has been the nature of the developments since then?

A. Since then we have discovered certain type of resins which we call heat seal promoters which can be added to the coating to further augment heat sealing and balance up the composition so that it does not detract from properties such as blocking characteristics.

Q. To what extent do these heat sealing developments affect the sale to users of Dupont cellophane?

A. Heat sealing cellophane put us in, as I view the picture, really put us in the business of using cellophane on

8472 automatic packaging machinery. It opened up to us prospects of business in such fields as wrapping of bread, wrapping of all baked goods, and I think I am safe in saying, at least it is my opinion that that is one of the big steps forward after the introduction of moistureproof cellophane, this new type of cellophane just opened the door within two years—within a year after we had introduced heat sealable cellophane it was the leading part of our business.

Q. Now we have discussed more or less three major areas: The coatings, the anchoring, and the sealing, and I want to take up more briefly some of the other developments besides those three which have taken place in various aspects of this moistureproof cellophane development. Can you name, first of all, what some of those areas are?

A. Well, I would judge that probably the next most important area of work was on the improvement of surface characteristics.

Q. You have told us a good deal about the nature of that improvement. How much research work was done to improve that slip and the surface characteristics?

A. Well, that involved quite a bit of research effort. It is, of course, another one of the things that we were working on continually to improve, but before we had good slip agents I would guess that we had one to two men working on it over a period of three years.

8473 Q. Where was that work done, the different plants or here in Wilmington?

A. That work was done in Buffalo, the research laboratory, where I was located?

Q. How did the development of improved surface characteristics affect the sale of the cellophane?

A. That was another essential feature in operating cellophane on high speed packaging equipment. I think I am safe in saying that the film we made in 1931 would not operate on a high speed packaging machine. I don't know whether it would operate on a low speed. It certainly would not operate effectively on high speed wrapping equipment.

Q. What amount of work has ben done, Dr. Mitchell, in the development of these different types of films we talked about?

A. Well, to me that has been one of the most interesting and I think quite an important part of the cellophane development, the development of special films, special types of films for specific uses, for specific applications.

Now, back in 1931 that wasn't a recognized concept of the cellophane business. In fact, along about 1933 I had the job of developing the all-purpose, as we called it, moisture proof formula, and that formula turned out to be the formula we used for producing heat sealable film, MST film, for many years.

8474 It soon became evident that such an approach was unrealistic, that if we wanted to get into the cellophane business in a broader way we had to develop films for specific applications, tailor-made to the needs of that business, and when we directed our research efforts—at least a part of our research efforts have been directed for many years along that line—I think that was a tremendous force in diversifying, expanding the cellophane business.

At the present time we make a certain film for wrapping cigarettes. We make another film for the general bread trade and similar type of applications. We make still another film for wrapping cigars. We make still another film for wrapping doughnuts and smoked sausage. We make still another film for

putting on hoods on milk bottles, and so on. And we have another film for wrapping fresh meat. I am sure I haven't covered them all.

But we have developed films that had the properties required for specific markets so that that film could be used effectively and satisfactorily in that market, and that has broadened the base of the cellophane business.

Q. I wanted to ask you a specific question there. There has been some testimony elsewhere in the case about a Saran coated cellophane. What is that?

A. Saran coated cellophane is one of our newest developments and a lot of the work is still in the process
8475 development stage.

Q. Is that a new type——

A. It is a new film, a new type of cellophane, a new film, that has anchored to the film a vinylidene chloride polymer.

This film has an entirely different behavior on a number of products on which we package it. You can use it for packaging. If we put that film around a package, for example, of cookies where the cellophane, if you observe it with a critical eye you will notice it puckers and ripples, this film remains flat and smooth. The moistureproofing is not degraded when in contact with greasy foodstuffs and dried fruits, and it is a film in the cellophane line, which, if I wanted to compare it with a competitive, I would say is most like pliofilm, and it can be used, we believe, in applications where cellophane has not ben successful heretofore, or where we have been pushed out of the business by pliofilm.

Q. Well, now, what are the L-type films?

A. Well, the L-type films are—maybe I could go back and illustrate that by comparing the moistureproofness of——

The COURT. Where is our big book?

(Large book handed to the Court.)

By the COURT:

Q. Some of these that you mentioned, could you show me illustrations of them here some place?

8476 A. I don't know whether I can tell by that.

Q. Well, I thought just maybe for the uses. They have the names here, you see.

A. This (indicating in book) is a double-walled bag of regular heat sealing cellophane. That is the type that is the type that is used for many purposes for making heat sealing bags. It is the type that is used for wrapping bread.

Q. That last one that you mentioned, that is what I wondered about?

A. The L-type film?
Q. Yes.
Mr. GESELL. Or the Saran coated film? Which did your Honor have in mind?
The COURT. The Saran.
The WITNESS. The Saran coated film——
Mr. GESELL. I don't know if they are in this book.
The COURT. I do not recall seeing one. That is why I wondered.
Mr. GESELL. I doubt if there are any in that book. I think it is too new a development.
The COURT. All right.

By Mr. GESELL:

Q. When did you first commercially sell Saran coated film?
A. It is still being made on a limited commercial scale.
8477 I guess we have been selling it now for about three years on a limited basis.
Mr. GESELL. So I doubt if it has gotten into that selection.
The WITNESS. But the L-type films, I think I might describe them this way. Ordinary plain cellophane, non-moistureproofed, has a permeability value in terms of our method of running the test of around eight thousand, seven to eight thousand. Moistureproof cellophane has a permeability value of around ten to forty. L-films are films that have a higher degree of moisture permeability. The ones that we have used commercially have been up in the range of three to four hundred for certain types and for other types up in the range of four to five thousand permeability.

By Mr. GESELL:

Q. What are these particular types of films used for, Dr. Mitchell?
A. These are generally used for packaging moist foodstuffs where you want to have a reasonable degree, a certain degree, a limited degree of moisture protection, and yet you don't want to hold in so much moisture that other effects coming in the place degrade the product.
For example, if you put moistureproof cellophane on a sugar doughnut, there is enough moisture left in the doughnut to
8478 come out on the sugar that is on the outside of the doughnut to make it slimy, and in the matter of a day you couldn't sell it.
Now, we have to have a film that is going to keep the doughnut fresh for three or four days or the user can't keep it on the shelf long enough to sell it. If you wrap it in plain cellophane, it will dry out in a day. So we developed a film that would protect, that would keep the doughnut edible for four days and yet would let

enough moisture out of the film so that the sugar coating would not become slimy, slippery.

The same thing is true of such products as smoked sausage. They are a rather moist product, high moisture content. If you wrap them in highly moistureproof film, you will get so much moisture that mold and slime will grow on the surface and you will get a spoiled article.

Q. When you say moistureproof, you mean regular moistureproof?

A. A high degree of moistureproof.

Q. L-type is a moistureproof film?

A. I would call it a semi-moistureproof film. I think in the high ranges of L's, I would even call it a moistureproof.

Milk bottle hoods, of L-type film, we wanted a film that wouldn't condense moisture on the under side of the film, so that it
8479 would obscure reading the printed cap on a milk bottle.

Q. Well, now, how much research work and time was spent in this particular type of development?

A. Well, that is a little bit hard to say. I would estimate that we probably spent about at least an eighth of our research effort of quite a number of years on L-type films.

Q. How did the work affect Dupont's sales in the uses of Dupont's cellophane?

A. It put us into markets where other types of cellophane would not do a satisfactory job. It put us in the packaging of smoked sausage; it put us in the milk bottle hood business. It put us in the fresh vegetable wrapped business, that is, high moisture content fresh vegetable wraps, because there, too, if you try to package it with a moistureproof tight film, moisture condenses on the under side and gets so cloudy you can't see through it.

Q. While you are talking about this, I want to be sure I understand this permeability value. That is a measure of the degree to which moisture passes through the film?

A. Water vapor passes through the film.

Q. And if there is a high permeability value, does that mean a little moisture or a lot of moisture passes through?

A. Well, I would say a lot of moisture passes through.
8480 The COURT. This has to do with hydroscopic materials, is that right?

Mr. GESELL. That is right, your Honor, I am sure.

By Mr. GESELL:

Q. I am going to ask you about a number of other types. You mentioned the cigar film, that you had a special type of cigar film. Can you tell us a little about what the research problem and development there was, briefly?

A. Yes. Of course, the early cigar film was used in the form of a sealed tube, adhesive sealed tube. The first film that was used for wrapping cigars I believe was just an ordinary MT cellophane; it had no heat sealing properties that amounted to very much, but you could seal it together enough so that on a transverse pull, pulling across the seal, it would cling together lightly, so if you weren't too rough with it it would hang together. When the heat sealing film came on the market, it sealed up the cigar too tight, people could'nt get the cigar open.

But the most serious difficulty we encountered in that area of our business was the fact that our MT type film, that type of film would not operate efficiently, with a high degree of efficiency on wrapping machines. The Sylvania Company came out with a film which was better than our film for wrapping cigars, and over a period of a couple of years they took a great deal of our cigar business away from us.

8481 That problem was worked on by a number of people over a period of I would recall as about two years, and I was finally assigned to the problem and actually taken off of this so-called systematic project that I was on and worked on developing a formula that was satisfactory for wrapping cigars. We went out in the trade, found out what was needed, what the specifications were, where our film was falling down, in company with technical sales people. We set out tests in the laboratory for evaluating those deficiencies. We worked out formulas, coating formulas which corrected those faults, and of course in so doing we ended up with a special formula that was different from any of the other formulas that we had. We put that formula into production and then were able to compete successfully with Sylvania in the cigar wrapping field.

Q. Now, we have had some discussion also with respect to M. S. A. T. films. What is M. S. A. T. 80?

A. Well, M. S. A. T. 80 is the Dupont film used for packaging fresh meats.

Q. How was that particular film developed?

A. That particular film was developed by a broad study and program undertaken in the technical sales section together with working together with the research organization, and that incidentally was one that after we once set our task, set ourselves to the task of developing film, we came along very rapidly because we had enough background and know-how to put the things together when we knew what we had to have.

8482 Q. Well, what was the particular problem you were trying to solve?

A. Regular moistureproof cellophane, if we put it onto fresh meat, gives satisfactory moisture protection but the meat discolors.

We have to have an anchored film where the coating will cut them off. We found that if we coated the film on one side so that the film would swell when it was in contact with the meat, the oxygen permeability of the film would become high enough so that the film would then maintain its natural bright red color over a period of several days.

Q. So that the meat would?

A. Yes, the meat would. So that that is the basis and that is the design, that is the architecture for the M. S. A. T. 80 film. We have an anchored film, coated on one side, which when in contact with fresh meat absorbs sufficient water to increase the oxygen permeability to a level where it will maintain the bright red color.

Q. And how did the development of that film affect the sales?

A. Well, that is a film that put us in the packaging of sliced fresh beef and sliced fresh meat and, of course, has had a big part—I think it has had a big part in the self-service packaging of fresh meats.

Q. Now, we had some talk yesterday about the cellulose content of the viscose. Was work done by the cellophane re-
8483 search organization looking toward ways and means of increasing the cellulose content of the viscose?

A. Yes, it was. I wasn't connected with that work, of course. At the time I was working on moistureproof cellophane, but again it was done in the laboratory where I was working.

Q. Well, what is the effect of increasing the cellulose content of the viscose from the point of view of operations?

A. Well, it has a tremendous influence on cost. In the first place, by increasing the solids concentration, the cellulose concentration in the viscose, we can get more cellulose, more film, if you will, through available equipment. So that that will lower our costs.

Then a second and I think the bigger factor is that by so doing we were able to lower the caustic content of viscose, and then we made resultant savings in both caustic and acid which are normally wasted in our process and it resulted in big savings in cost.

Q. How long has work on that project been going on in the Company?

A. I don't know exactly when the work on that was started—I don't recall exactly. I know the work that was done in some of the earlier developments carried over a period of several years.

8484 Q. Is there work going forward on it now?

A. Yes.

Q. Has it been possible to increase the cellulose content of the viscose appreciably?

A. Yes. The last change that I recall was that the cellulose content was raised from 7½ to 8 per cent., which effected quite considerable savings.

Q. Dr. Mitchell, I show you DX-898 entitled, "Major Research Projects on Moistureproof Cellophane". Have you seen that list before?

A. Yes, I have seen the list before.

Q. Are you generally familiar with the various projects listed there?

A. Yes, I am generally familiar with them. Some of them were before my time, but I am generally familiar with what they were from seeing them.

Q. Can you state whether or not those projects were projects initiated and carried out for the purposes and at the times indicated on the exhibit?

A. Yes. Every one of these was a project that was undertaken at the cellophane—not every one; I think some were undertaken at the Experimental Station, and most of them were undertaken at the cellophane research laboratory at Buffalo.

Q. Now, I want to ask you a slightly different line of questions for a moment. Are you, as a result of your work,
8485 generally familiar with the patent coverage which exists today as to moistureproof cellophane?

A. Yes, I think I am generally familiar.

Q. Are there today to your knowledge, Dr. Mitchell, any patented materials or processes which would prevent someone else from producing a commercially satisfactory moistureproof cellophane?

A. No. In other words, I can say that I could produce—I will put it this way: I can produce a commercially satisfactory cellophane today without infringing any existing patents to my knowledge.

By the COURT:

Q. Of Dupont?

By Mr. GESELL:

Q. Of Dupont?

A. Of anybody.

By the COURT:

Q. To follow that up, do you know if any other company has any patents on moistureproof cellophane?

A. Oh, yes.

Q. For example?

A. Sylvania. And the only other ones that I am familiar with, that I can recall, are ones of foreign companies like British Cellophane Limited.

The COURT. Proceed.

8486 By Mr. GESELL:

Q. Are you familiar, Dr. Mitchell, with the nine patents licensed by Sylvania to Dupont under the moistureproof license agreement?

A. Yes, I am familiar with them from a technical viewpoint.

Q. Did you make any evaluation of those patents for the Cellophane Company management at any time?

A. Yes, I did.

Q. What was the purpose of the evaluation?

A. As I understand it, we had an agreement with Sylvania under which the licensing agreement would expire at a certain period if we did not have the patent then in use in our process, in our plants. So I was asked to evaluate these patents to see whether they were useful for Dupont, and of course if they were I suppose we would have gone ahead and made arrangements to use them.

Q. Did you in fact ever use any of the patents?

A. No, we did not.

Q. Can you tell us what the importance, if any, of these patents was individually or by groups to cellophane technology?

A. Well, I would say that those were of minor importance, the ones at least on the list I evaluated there, as far as cellophane technology is concerned.

8487 Q. Are any of those patents the type of patents which would have prevented anybody else from entering the cellophane business?

A. No.

Q. During this period from 1931 up until the present had the properties of glassine and waxed paper changed in any way, and if so how?

A. Yes. In my experience they have changed quite considerably. I recall that in Buffalo, back in 1930, '31 and '32, the measurements we made on the permeability values, the moistureproofness values of waxed papers at that time were quite consistently much higher than the cellophane that was made at that time. I don't recall that there was ever any moistureproof heat sealable glassine or paper that was on the market prior to the time that we introduced moistureproof heat sealable cellophane. But the paper people have improved their product very considerably over the years. I think in my opinion it is a result of the stimulation and the competition that they have gotten from cellophane, so that wax papers nowadays can be gotten that are as

moistureproof as cellophane, some more moistureproof. Heat sealable papers can be easily procured today, moistureproof and heat sealable.

Q. Has there been any change in the commercial transparency of the glassines?

A. I wouldn't be a very good judge of that. I would

8488 guess——

Q. Well, don't guess. You don't know?

A. No.

The COURT. You know, it is very seldom a witness admits he is guessing.

Mr. GESELL. That is a good sign, your Honor.

By Mr. GESELL:

Q. During this period did Dupont compete with Sylvania on terms of the quality of the films produced?

A. Yes.

Q. Can you give us some examples of that competition?

A. Well, of course from the research viewpoint we were always competing. We were continually striving to make our product better in moistureproofness, heat sealing, these other important properties, so that we would keep ahead of Sylvania. We didn't always succeed in keeping ahead of them. We usually did. I think I mentioned a little earlier the fact that they had us over a barrel on cigar film for a while.

8489 Q. Apart from that, were there other developments that you recall where Sylvania was ahead of you or in most instances were you ahead of Sylvania?

A. I can recall one instance where Sylvania was ahead of us in timing. I think they brought out a heat sealable film commercially shortly before we did. It was a low order of heat seal. And when we brought our film out on the market, it was an entirely different range of heat sealing. I remember I had not been with the company too long then, and we were working on heat sealing films, and when Sylvania brought theirs out, by this test I mentioned, as I remember the figures, it peeled with a strength of about 10 to 30 grams. And some of us younger fellows that were working on it were anxious to get our product out on the market. We could do that good.

Q. You could do that good?

A. Yes, then. But I remember our chemical director t.. said, "We are not going to bring our cellophane film out on the market till it is as good as we think it ought to be," which in terms of this test was about a 100 grams. So we brought our heat sealing film out on the market after Sylvania had introduced their heat sealing film.

Q. During this period did you from time to time make tests and studies of other cellophanes?

A. Yes.

8490 Q. And analyze their properties?

A. Yes.

Q. Did you relate those properties to the properties of Dupont cellophane?

A. I compared them, yes.

Q. How would you compare the quality of Dupont cellophane with the cellophane produced by others?

A. By measuring in the laboratory the properties which we considered important,—moistureproofness, rating of transparence, surface characteristics, physical properties of the film.

Mr. MINICUS. May I ask, your Honor, that the others spoken of in that question be identified?

The COURT. I don't wish to direct Mr. Gesell how to conduct his direct examination,—but it would seem to me that would be a most appropriate question for you to ask on cross-examination.

By Mr. GESELL:

Q. Will you go on with the qualities that you testified—what was the last one on the list?

A. Surface characteristics of the film, blocking characteristics, what we called the physical appearance of the film, and such as elongation, tensile strength, tearing resistance. We would rate the odor and taste of the film, anchorage, properties, heat sealing.

8491 Q. Now you compared them from the point of view of those various qualities?

A. These properties.

Q. And how did Dupont film compare, qualitywise?

A. Qualitywise, Dupont film, in all the tests I have ever run, was consistently better than any foreign film that we ever tested. It was quite consistently better than Sylvania's film in one or more respects.

Q. Dr. Mitchell, during this period did you have occasion to see and learn of such technical information as Dupont received from time to time from the various foreign companies, like La Cellophane and B. C. L. and Kalle?

A. Yes, I did. As far as I know, I received all such reports.

Q. Was any of that information received from La Cellophane or the other so-called foreign associates concerned with developments of moistureproof film?

A. Yes, some of them were.

Q. Was any of that information of any significance to Dupont in the development of its moistureproof film?

A. It was never of any value to us and never used.

Mr. GESELL. You may examine.

Mr. MINICUS. No questions, your Honor.

The COURT. You are excused, Dr. Mitchell.

Mr. GESELL. The next witness will be Mr. McCune.

8492 JOHN FRANCIS McCUNE, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

Mr. McGLOTHLIN. May it please the Court, I want to make the usual brief explanation. Mr. McCune is a Dupont employe, a production manager of film. He will testify as to developments that have been made in cellophane manufacture during his connection with it, expansions in production, improvements in quality from a mechanical standpoint, and the purposes and intent with which those things were done.

Mr. FITZPATRICK. If your Honor, may the government state its position with respect to this testimony?

The COURT. Certainly.

Mr. FITZPATRICK. Then it is exactly the same as it was with the previous witnesses' testimony.

The COURT. Yes. Under your theory, it is not a justiciable issue in this case.

Mr. FITZPATRICK. That is right.

Mr. McGLOTHLIN. I would like to answer only, your Honor, that the government has charged directly that the expansions and increases were made with the intent of excluding competition.

The COURT. I understand; and your position is that it was under the compulsion of competition with the rest of them.

8493 Direct examination by Mr. McGLOTHLIN:

Q. What is your present position with Dupont, Mr. McCune?

A. Production manager, film department.

Q. How long have you been with Dupont?

A. Twenty-four years with Dupont. Prior to that I was with Griselli Powder Company, since 1916. From 1916 to 1928 I was with the Griselli Powder Company, starting out as an analyst.

Q. What were your later positions with Griselli?

A. I held various positions, such as supervisor in charge of laboratory, supervisor in charge of various operations in the plants, and plant superintendent in charge of plants, and finally with Griselli manufacturing superintendent in charge of three plants.

Q. Those were explosive plants?

A. They were.

Q. What were your initial duties when you came to Dupont in 1928?

A. I was assistant plant manager, Rapauno Works.

Q. Of the explosives department?

A. That's right.

Q. When did you transfer to any activity connected with cellophane?

8494 A. In 1931. Late 1931.

Q. What were your first duties connected with cellophane?

A. Assistant plant superintendent at the Buffalo plant.

Q. What have been your subsequent duties with cellophane manufacture?

A. In 1934 I was named plant superintendent of the Old Hickory Cellophane Plant, and remained in that position until 1940, when I was assigned to a project development, to design and to follow construction of the Clinton cellophane plant. On completion of that construction, I was made plant superintendent, and remained in that position until 1944, at which time I was placed in my present position.

Q. When you were first transferred from the explosives department to the Dupont Cellophane Company, what was your overall impression of the manufacturing operations of cellophane?

A. I might first explain that I came from a quite well established and pretty highly developed industry, mechanically. My first impressions were one of quite inefficient operation. Labor costs were high, wastes were high, and quality was quite nonuniform.

Q. Were you given any instructions to attempt to improve quality?

A. I was.

Q. Were you told what the objectives of improving

8495 quality was?

A. Yes. Many times I have been. I was at that time. That is, to meet competition of other flexible wrapping materials.

Q. You are referring to Sylvania at that time? Its cellophane?

A. No, I think not.

Q. What flexible wrapping materials are you talking about?

A. Wax and glassine paper. Also the importance of reducing costs was stressed, so that prices might be reduced and markets broadened.

Q. In your opinion has there been any increase in the efficiency of cellophane manufacture in the twenty years from 1932 to 1952?

A. Very major.

Q. Can you give us any measures of the extent to which that efficiency has been increased? Take for example the amount of raw materials consumed per one pound of cellophane produced.

A. Yes. Since 1922 the unit consumption of wood pulp has

been reduced approximately 20%; the unit consumption of caustic soda has been reduced 40%; the carbon bisulphide, approximately 33%; the sulphuric acid, 60%.

Q. Are those the principal raw materials in the produc-
8496 tion of the film itself?

A. They are.

Q. Has there been any increase in the finished product-output per payroll hour?

A. Yes, it has been increased about 380% in twenty years.

Q. Have you been able to reduce waste, starting from the end of the casting machine, in the mill roll, to packed product? How much has that been reduced?

A. In the year 1932 the finishing waste was 15.3%. Last year it was 3½%. That is 23%, approximately.

Q. When you first went to the cellophane plant, how long did it take for a given batch of wood pulp to pass through the chemical building from the time it entered the steeping press until the viscose made from the pulp was delivered to the casting machine?

A. About four days.

Q. How long does it take now?

A. An average of two and half. We have one plant that does it in two.

Q. How many men were required to operate a casting machine in 1932?

A. It was about three or four times the present. I think about four or five people, probably.

Q. And how many men are required to operate a casting machine today?

8497 A. An average of one per machine.

The Court. We will recess until two o'clock.

(At this point recess was taken until two o'clock the same day.)

2:00 O'clock P. M., the Same Day.

Present: As before noted.

John Francis McCune (resuming).

Direct examination (cont'd).

Mr. Gesell. Your Honor, before *we* Mr. McGlothlin continues with the witness, I would like some time before the week is out to have about a half hour with the Court and Mr. Minicus and his associates to talk about the plan and schedule of some of the future parts of the trial, and my suggestion would be, if it meets the convenience of everyone, that we do it at the close of this witness's testimony, which I think will take an hour or hour and a half.

The Court. All right.

By Mr. McGLOTHLIN:

Q. Mr. McCune, at the recess you were giving us some measures of the increases in efficiency in cellophane manufacturing
8498 that have occurred during the twenty * * * experience. What was your maximum casting speed in 1932?

A. 30 meters per minute.

Q. What w your maximum speed in 1945?

A. 65 meters a minute.

Q. And what is your maximum casting speed today?

A. 120 meters per minute. And these figures are all in terms of 300 gauge for coating.

Q. How does the manufacturing process in the casting machine differ for film that is to be coated and film that is to be sold as plain transparent?

A. Primarily in respect of the type of softener used and in respect of the sizing which is put on the film, which has a slip edging to prevent matting.

Q. On which type film is the sizing put?

A. The P. T.

Q. How fast can you run P. T. through the casting machine?

A. Our maximum speed is about 75 to 80 meters.

Q. What is the limiting factor that makes that so much slower than film for coating?

A. Primarily, the matter of application for the size.

Q. You can't pick up the size at the higher speed; is that it?

A. Not satisfactorily, no; to date.

Q. I notice you give your speeds in meters. Is that the measment that is commonly used in the Dupont plant?

8499 A. Yes. That is inherited from the French. There were some rolls, for example, in the casting machines as designed by the French that were one meter in diameter. Therefore the speed of rotation of those rolls measured the meters produced.

By the COURT:

Q. I have forgotten already,—where are you presently occupied with your work?

A. In Wilmington.

Mr. McGLOTHLIN. He is now production manager of film.

The COURT. Of all the plants?

Mr. McGLOTHLIN. Yes, sir.

By Mr. McGLOTHLIN:

Q. Now turning for a moment to the coating towers, Mr. McCune, what was the speed of the film in the coating towers in 1932?

A. 30 meters per minute.

Q. And what is the speed with which Dupont coats film today?
A. Upwards of 200 meters a minute.
Q. In the coating process is there a step known as solvent recovery?
A. There is.
Q. What is that step?
8500 A. The coating solids are dissolved in organic solvent. The solvent is evaporated from the film after the application of the coating bath to the film; the air which is used to carry the solvent vapors is carried to a solvent recovery through ducts or large pipes. There the solvents are extracted from the air by adsorption of activated carbon. Those solvents are then removed from the carbon by means of live steam and condensed, rectified, and reduced for production of the coating bath.
Q. In 1932 what was the percentage of solvent recovery that was standard in the Dupont plant?
A. Approximately 83%.
Q. What is the standard of solvent recovery today?
A. It ranges from 93 to 97%, depending on the installation.
Q. In 1932 how many horsepower were required to drive a casting machine per meter per minute of speed?
A. One.
Q. What is the power requirement for a casting machine today?
A. Between a third and a half.
Q. Of a horsepower?
A. Of a horsepower; that's right.
Q. Per minute of speed?
A. That's right.
8501 By the COURT:
Q. It has been months ago since I heard some statement concerning the recoveries but it slipped my mind. What are those materials?
A. Ethyl acetate and toluene.
Q. Are they sold in turn or used?
A. No, they are re-used so that our consumption of those solvents is merely the loss that we obtain in processing this three to seven per cent.
Q. Well, do they go back into the operation?
A. That is right.
Q. Of the manufacture of your product?
A. They are again used to dissolve fresh coating ingredients and are recycled.
Mr. MCGLOTHLIN. Your Honor may recall at Richmond in the coating——

The COURT. I remember it now. That is what we are talking about (indicating on diagram)?

Mr. MCGLOTHLIN. Yes, sir. I was going to say that the rather penetrating volatile odor you got in the coating area is part of the three per cent. that gets lost.

By Mr. MCGLOTHLIN:

Q. In 1932 what was the width——

The COURT. I want to get this straight.

8502 By The COURT:

Q. You said up to 97 per cent. recovery; that is of the actual material that went into the process?

A. Of the solvents.

Q. That is nearly perpetual motion, isn't it?

A. Yes.

The COURT. Amazing.

By Mr. MCGLOTHLIN:

Q. Mr. McCune, in the coating operation, the coating bath consists of the solvent and of what else?

A. Of nitro-cellulose, a plasticizer, wax.

Q. Now, those solids are carried off on the film as it is manufactured, is that correct?

A. That is correct.

Q. And the thing you recover is the solvent carrier of the solids, is that correct?

A. That is correct.

Q. And that is re-used?

A. That is correct.

Q. What width of hoppers was Dupont using in 1932?

A. 76 inch.

Q. And what was the width of the finished film as it was wound up at the other end of the casting machine?

A. About 36 inches.

Q. And what width hopper does Dupont use today?

8503 A. 82 inch principally.

Q. And what width of film, completed film, do you get from that width of hopper?

A. 48 to 50 inches.

Q. Now, after the material is wound up at the end of the casting machine or at the end of the coating tower, what further processes does it go through before it is ready for sale?

A. In the case of PT film it is taken directly to the finishing area, slitting or sheeting, as the case may be.

Q. Now, what is the slitting operation?

A. That is an operation wherein the semi-finished rolls as produced on the casting machine——

By the COURT:

Q. We are at this point now according to this diagram, are we not, Mr. McCune (indicating on diagram)? We finished the coating?

A. Now, on the PT there is——

Q. You see, this is the commencement of the operation [indicating on diagram]?

A. I am not familiar with this drawing. In the case of the PT we are at this point [indicating], and that product then comes directly over here [indicating].

Q. This only comes into operation on moistureproof?

A. That is right.

8504 The COURT. I have it.

By Mr. MCGLOTHLIN:

Q. The slitting operation is the reduction of the long mill rolls into smaller rolls less wide, is that correct?

A. That is correct. That is the package, the finished product from that operation is the package which is sold.

Q. At what speed did you slit mill rolls in 1932?

A. 150 feet a minute.

Q. At what speed do you slit today?

A. 1,000 feet per minute.

By the COURT:

Q. Of what metal is that cutting tool?

A. That is a tooled steel.

Q. That is harder than ordinary steel?

A. Right.

By M. MCGLOTHLIN:

Q. How many casting machines did Dupont have in 1941?

A. 56.

Q. How many does it have today?

A. 56.

Q. What was your productive capacity in 1941?

A. Approximately 110 million.

Q. What is your productive capacity today?

A. 218 million.

Q. Now, we have gone down a number of various

8505 measures, Mr. McCune. Will you tell me whether or not you regard each of them as a measure of manufacturing efficiency?

A. Yes.

Q. Now, in view of the fact that you have made such improvements since 1932, in your opinion as an engineer was the manufacturing process in 1932 a sound process?

A. Yes.

Q. Well, how do you explain these improvements then?

A. It needed commercialization. It needed to be placed under control for quality purposes. The machine efficiencies had to be improved. We had to re-design machines so that they were sturdier and more capable of continuous operation.

Q. Well, now, will you start with the chemical building, and I would like you to give me some of the major improvements that have occurred during your experience?

A. Well, the first and the one that I regard as the key to the entire development is the matter of getting the process under control, temperature control, time control, control of solutions, a steady running of equipment without interruption; a uniformity of conditions must be first established before any real development can be made or real quality obtained in any operation. That was true in this case.

Q. What is the importance of temperature in the operations of the chemical building?

A. The temperature of the steeping caustic, temperature
8506 of the alkali cellulose in the shredder, temperature of the alkali cellulose during the aging process for viscosity control, temperature of the chemical reaction in the baratte where cellulose xanthate is produced, temperature of mixing——

Q. That is mixing the xanthate?

A. Wherein the xanthate is dissolved in caustic solution.

Q. Why is temperature so important in each step?

A. Because we are dealing primarily with the chemical reaction, and the rate of that reaction is to a large extent influenced by temperature.

Q. Well, how did Dupont improve its temperature controls? What did it do?

A. It primarily installed automatic controllers for the control of the temperatures at the individual steps, established definite operating procedures, put in very definite and specific schedules, that is, improved their accuracy over those that existed earlier.

8507 Q. I take it temperature applies to a number of steps in the chemical building?

A. Practically all, yes.

Q. Now turning to particular steps, have there been any major developments in the initial two steps of soaking the pulp in caustic soda, draining it, and then shredding it into alkali cellulose?

A. Yes. The steeping presses as they existed when I first saw them were hand operated. That is, the ram was hand operated. That pressing operation by hand was extremely nonuniform, so that the first step was to tower, to advance the ram by tower, first hydraulically and later electrically, and to install equipment to control the rate of advance of the ram and the length of time of pressing. Later on a continuous process for the steeping and shredding operation was designed and installed.

Q. Is that now actually in use in some Dupont plants?

A. Yes.

Q. How long did it take to develop the continuous steeping and shredding process?

A. I was not directly connected with the initial development. I think that was a matter of a couple of years. But it has been under development for a period of about 15 years and it is not finished yet:

Q. After the alkali cellulose is made by the shredding,
8508 the next is the ripening, is it not?

A. That is correct.

Q. Have you made any mechanical developments of importance at the ripening stage other than temperature control?

A. Yes. The original installation provided a great number of small cans in which the alkali cellulose was stored. Those cans were designed with the idea in mind of maintaining a uniform temperature throughout the mass, and they were sized with that in mind. It was a very laborious job and required a large amount of labor. So that large cans were designed and sectionalized so that the exposed surface was approximately the same, not too different from the old installation.

Q. What was the engineering problem in just changing from a small can to a can of greater volume?

A. That was a matter of maintaining uniform temperature throughout the mass, which was again determined by the relationship of the exposed surface to the volume.

Q. After alkali cellulose comes xanthation; is that correct?

A. That is correct.

Q. And then the xanthate is mixed with caustic soda to form the viscose; is that right?

A. Following the xanthation.

Q. Following the xanthation?

A. Yes.

8509 Q. Will you tell us of any major developments in the mixing process?

A. The original French mixers were very small and slow in operation. The first step was to install pumps whereby the charge could be circulated while it was being mixed. These

pumps were especially designed pumps which aided in the mixing and speeded up the mixing. The next step which logically followed that was increasing the size of those mixers. Such an increase in size, of course, would not have been possible with the original agitation, but the addition of the outside agitation made that possible. The third step was the adoption of a new type of mixer, known as the visolder, which was much more rapid in action and reduced the mixing time by about half.

A further step was the adoption of the disintegrator, which is a form of continuous mixing. That again both reduced the time, reduced the required floor space for mixing of a given volume of viscose, reduced the labor cost and the investment cost.

Q. So we will understand it, will you describe first the mixer as it was in 1932 and the mixing apparatus in the latest development?

A. The original mixer was a batch process.

Q. What did the machine look like?

8510 A. It resembled a tank with a bulge or mixing chamber at the bottom, a shaft with a form of agitator extended to the body of the mixer, and in operation the water and caustic for dissolving the xanthate was first charged, the xanthate was dumped into the mixer and mixed for a period, I believe, of some six hours.

Q. By batch process, do you mean that each of these tanks had to be loaded, mixed, and unloaded each time? Is that correct?

A. Yes.

Q. Now describe the disintegrator part.

A. The disintegrator may be visualized as a vertical cylinder in which is installed a second vertical cylinder which is rotated at high speed. This inner cylinder is grilled with fine holes, and I believe it rotates at a speed of about 3600 revolutions per minute. The viscose is pumped continuously into the top of the cylinder, of the inner cylinder, and first forced by centrifugal force out through these small holes. That results in the application of a lot of power in a short space of time and accomplishes the mixing which formerly originally required some six hours.

Q. You said the viscose was put into the central drum?

A. I should have said the slurry. That is, the mixer of xanthate and caustic and water.

Q. And I believe you said that is a continuous process?

A. It is.

8511 Q. Before leaving the chemical building, Mr. McCune, does Dupont make cellophane from a viscose designed for cellophane as contrasted with one designed for rayon?

A. Yes.

Q. Why don't you use a rayon viscose for making cellophane?

A. I don't know whether you could make a cellophane out of a rayon viscose or not. There is no incentive to try it. In the first place, we know that it would cost more, so there is no reason to do work on it.

By the COURT:

Q. What are the critical points of difference between the two types of viscose?

A. I am not too familiar with the rayon viscose. I know that the composition is considerably different, the ratio of the caustic to the cellulose is considerably greater, and the concentration of cellulose in the viscose is materially less.

By Mr. McGLOTHLIN:

Q. Mr. McCune, why would it cost more to use rayon viscose?

A. For the reasons just enumerated,—the lower concentration of cellulose in the viscose and the higher ratio of caustic soda to cellulose.

Q. Approximately how long is a casting machine from the front end of the hopper to the back end of the drive?

8512 A. I am afraid that one, I can't——

Q. Can you give us an idea of whether it is 20 feet or a hundred feet, or how long?

A. Yes; between 160 and 200 feet, some place in there.

8513 Q. Have there been any developments during your experience in the casting hopper?

A. Yes.

Q. Will you tell us what they were?

A. The casting hopper has been re-designed probably several times. The original French hopper, had, I believe, seven wheels as adjustments, I mean, for adjusting the width of opening up the hopper lips and controlling that opening.

The first development was to merely increase the number of those control points. That gave us some improvement in our control.

The next development insofar as adjustment is concerned was to completely re-design the type of control and supply a vernier-like adjustment in multiple, and there are in the order of some thirty such adjusting points. That very materially improved our control.

But still a further development is in the experimental stage of controlling the opening electrically by means of electrically heated bolts, which by passing more or less electric current through them lengthens or shortens them by expansion and so controls the opening to a much finer degree.

Q. Is the size of the aperture at the hopper the same from end to end of the hopper?

A. No.

Q. Well, why does it have to be varied?

8514 A. Because of the transverse shrinkage of the film as it passes through the casting machine. The edges shrink more per inch of original width than does the middle of the sheet. Therefore the sheet tends to become thicker at the edges.

Q. And these adjustments of the hopper are to compensate for that?

A. These adjustments of the hopper are to compensate for that shrinkage effect.

Q. Now, have there been developments in the hopper lips themselves where the viscose passes into the bath?

A. Yes. A great deal of experimental and research work was carried on on that point. Numerous materials were used, even to the extent of gold plating of lips.

Q. Was that a successful experiment in gold plating?

A. No, it wasn't. Finally a metal known as ilium G was developed, and that has improved quite satisfactory. The corrosion is at minimum rate. The appearance of the film has been very measurably improved. The viscose has little tendency to jell and stick to the lips and cause streaks and other defects in the film that is being produced.

Q. Mr. McCune, I want to get over some idea of the dimensions of which we are speaking. Now, we have a machine, I believe you said, over-all between 160 and 200 feet long and film running at 120 meters per minute, is that correct?

A. That is right.

8515 Q. Now, what is the allowable variation in the thickness of the film at the end of the machine according to Dupont's standards?

A. Speaking of our 300-gauge film, which is nominally one-thousandths of an inch thick, our standards call for a variation not to exceed 1 ten-thousandths of an inch.

Q. Was there any difficulty in the early days with the maintenance of hopper lips? If so, what was it?—Let me ask you first, how long is a hopper lip?

A. The original hopper lips were 76 inches long. The present ones are 88 inches long. That is 7 feet. Originally we didn't have adequate grinding or milling machines to grind these lips to a required tolerance.

Q. How accurately must they be ground, Mr. McCune?

A. Absolute, if such can be had. One of our tests is to set the ground faces of the lips together and shine a strong light back of them and if you can't see the light, they are pretty good.

Q. But if you can see the light they are not accurate enough?

8516 * * * chatter marks in the face which had to be honed out by hand.

Q. Have you got any notion how many man hours it took in those days?

A. I am afraid I can't quote that figure.

Q. How many does it take today to refinish hopper lips?

A. Two men can do it in a day.

Q. Now, the viscose goes from the hopper into the first tank, is that correct?

A. That is correct.

Q. Now, will you tell us any mechanical developments that have taken place, important ones, in No. 1 tank?

A. The French machines as they existed when I first saw the process were equipped with a roll which was immersed in the bath in No. 1 tank. This roll was some 18 inches or 2 feet in diameter. Its purpose was to carry the film, the partially coagulated film from the lips through the bath. The rotation of that roll underneath the bath caused a turbulence in the bath which affected our gauge control.

That turbulence obviously increases as the speed of the machine increases. So it was necessary to remove that roll, to remove the turbulence, in order to start on the increase in speed of our casting machines as well as for purposes of quality control at the then existing speeds.

8517 That was done by placing rods at proper locations underneath the surface of the bath and drawing the films over those rods.

Q. What is the latest development in No. 1 tank that Dupont uses?

A. The latest development is co-current casting wherein the film, or the viscose is first cast into a relatively stagnant bath and then drawn over to an inclined flume. The film passes down this incline flume with acid bath above and below it and is coagulated during that passage.

Q. What are the advantages of co-current casting as opposed to the one that preceded it?

A. That removes the tension from the film which is in a very tender state at that point and is an important factor in increasing the rate of movement of the film, or the speed of the machine through the bath.

Q. Was that developed by Dupont?

A. Yes.

Q. How long did it take to develop co-current casting in commercial practice?

A. As I recall it, the development was started in 1936. We first applied it commercially in 1946.

Q. Now, in the purification and wash tanks, have there been any major developments in the handling of the fluids or the films in those tanks?

A. Yes. The tanks as originally designed were as more
8518 or less stagnant baths. True, some of them had a constant flow, but there were no means to control the concentration of impurities that were removed from the film. We just dipped it into the water and out again. So there was developed what was termed a counter current cross flow washing——

Q. How does that work?

A. Well, if we will visualize a rectangular tank, and we will say it is six feet by ten feet by some two feet deep, and it is equipped with top rolls which we will say eight top rolls and seven bottom rolls, over which the film may pass, first over the first top roll, under the first bottom roll, over the next top roll, and so forth, so that the film as it passes through the tank is alternately dipped in the solution and removed.

We will assume that the film is entering at the north end of that tank and that the solution is entering at the southeast end, we will say.

I neglected to state that that tank is also equipped with dividers or partitions, so that it is divided into, we will say, for example, five sections.

8519 The COURT. Can you visualize all this, Mr. Fitzpatrick?

Mr. FITZPATRICK. Can I visualize it all? It is rather difficult.

Mr. MCGLOTHLIN. We could get in pictures, your Honor.

The COURT. I am following it pretty closely, from my visit.

The WITNESS. Returning to the introduction of the solution in the southeast corner of the tank, that solution as it enters, whether it is water or some chemical solution, is at its purest state as it enters the tank. As it passes from compartment to compartment, back through the tank, to final exit at the north end, the solution does its work, picks up impurities, or what have you. Conversely, as the film passes from the north end to the south end it becomes purer. So that in essence we have the purest solution in contact with the film when it is most free of impurities, and the solution with the highest concentration of impurities in contact with the most impure film.

By Mr. MCGLOTHLIN:

Q. Well now, how did counter current cross flow treatment of the baths affect cellophane production? What did it do for you?

A. That enabled us to purify the film in much shorter
8520 space of time, or travel, machine length.

By the COURT:

Q. What would be the physical appearance of a sheet of cellophane if it had not had all the impurities removed?

A. It would be white. It would be whitish.

Q. A whitish color?

A. Yes.

Q. Not transparent?

A. No.

By Mr. McGLOTHLIN:

Q. You mention the rolls that carry the film up and down in the tanks. Did Dupont make any development in the rolls themselves?

A. Yes. The original machine was built with smooth metal-surfaced rolls in the tanks, and then between each pair of tanks there was a squeeze roll or a type of wringer, just like a clothes wringer,—a little better constructed than that.

Q. What was the purpose of the wringer roll?

A. That is to separate the processes. When we are passing, we will say, from an acid wash to a water wash, we remove as much of the acid before it goes into the water wash as we can mechanically, so as to reduce the load on the washing operation. Those wringers were not very efficient as a means of removal of solution, and the smooth rolls in the tanks did not supply traction to the film, so as we tried to increase the speed, the faster we
8521 dragged the film through the solution in the tank the more solution was carried up on to the film on these rolls, and it resulted in simply lubricating the rolls so we had no traction at all on the film, and the traction was supplied at the end of the tank with this squeeze roll effect.

Well, that didn't do the film any good, so we had to do something else, and we developed a spirally grooved roll in the tanks. Now as the film contacted those rolls the liquid dropped down into the grooves, and so we got traction on the individual rolls, thus very much decreasing the tension peaks or the peaks of tension on the film.

Q. What is the disadvantage of peaks of tension in the film?

A. Well, that was the disadvantage; it tended to weaken the film, to distort it. And if that were carried far enough, the film would stretch and it would develop what we call slack. That is, the film would collect in the tank and finally wrap around the roll and break. So that obviously with that setup, the original French setup, the development of high speeds was an impossibility.

Q. Now turning to the dryer. Mr. McCune, tell us of any major developments made by Dupont in the dryer step of cellophane manufacture.

A. I think the greatest single advance was the development of a lacquer to lacquer the dryer rolls. The original
8522 dryer rolls were smooth surfaced cast-iron or lead-covered rolls. As I previously said, the film tends to shrink as it is being dried.

Q. Would it shrink across its width?

A. It will shrink across its width. With these smooth rolls there was very little resistance to shrinkage, so that from a 76-inch hopper we got only about a 36-inch width of film, which is less than half of what we started with, and the disadvantage of that was accentuated by the tendency to thicken at the edge. Well, when I first went to Buffalo we were having to trim some four inches off of each edge in order to get back to a thickness——

Q. In other words, that was the proportion that was over gauge?

A. That was over gauge, yes. So that one of our technical men developed a lacquer which after drying retains a tacky surface, and he applied that to the dryer rolls, and that in turn held the sheet from shrinking so much and reduced the difference in the holding power of the roll in the middle of the film and against the end of the film.

Q. What effect did that have on the size of the thickened portion where the shrinkage had piled up the film?

A. Well, that along with several other developments in the hopper and elsewhere, resulted in our ability to reduce that trim from the edge of the film to considerably less than an inch.
8523 It also very materially increased the capacity of our machine.

Q. How so?

A. By widening the final film.

Q. Was there any other important development in the dryer step than the lacquer?

A. In so far as the production of P. T. film, yes. One of our problems was pull-out or sheet flatness. The flatness is affected by several factors, one of which is the uniformity of moisture content. We find it right difficult to direct-dry cellophane to a uniform and predetermined moisture, but it was found that by drying the film in the dryer down below the standard moisture which we were aiming at, and then passing that dried film, overdried film, you might say, through a humidified chamber, we could bring the moisture back to a much more uniform and controlled extent than we could by direct drying. As I say, that was an important advance in P. T. film, and the reason it is not important in moistureproof film is because we had that same operation in the coating tower itself.

Q. What is a coating tower, Mr. McCune? Will you tell us what it looks like and how it operates? The Dupont model, that is.

A. The coating machine as designed and built by Dupont is a tower approximately six stories high. It is divided vertically into two sections or compartments. On the north side we may
8524 have the dryer section, and on the south side the conditioner section.

By the COURT:

Q. When you use the phrases *north side* and *south side*, does that mean actual due north and due south?

A. No; I am using that merely to distinguish.

Q. Oh. Because that was the location of the Richmond plant, and I thought maybe all your plants were constructed the same way.

A. No.

Mr. MCGLOTHLIN: He is trying to avoid saying this and that, which is not very descriptive.

The COURT. I see.

The WITNESS. On the ground floor or the operating floor is located an unwind stand, on which is placed the semifitted roll as produced at the casting machine. That unwind stand is on the north side of the tower, the same side as the dryer. The first floor is also equipped with a windup for rewinding the film after the cutting operation; this rewind being placed on the south side of the tower. Directly beneath the dryer side of the tower is a tank to contain the coating bath. Immediately above this tank is located a device for removing the excess bath from the film and properly spreading the coating. A roll is placed on the unwind or north side of the tower and threaded through the tank underneath a roll in the tank which contains the coating bath, up through these
8525 bath removal devices. It passes upward through the dryer side of the tower, which in effect is for the purpose of removing the solvents, which act as a carrier of the coating solids. That removal is accomplished by means of jets of heated air properly controlled and directed. The film presses on up to the top of the tower and over a roll and immediately down through the conditioner side of the tower, where the film picks up moisture from humidified air, which again is directed in jets on the surface of the film.

8526 Q. Now, you spoke of a device for spreading the coating composition on the film. What device does Dupont use today?

A. Dupont uses doctor rolls today, which again are of the wringer type construction, rolls made of cast iron, very carefully machined and polished and very well engineered to control the width of opening between the rolls.

So you visualize the film passing through a viscous bath at fairly high speed; it picks up quite a lot of this viscous solution, tries to carry it along.

Q. What is the size of these doctor rolls in diameter?

A. The original ones were six inch; these are standard at the present, eight inch in diameter, solid cast iron rolls.

Q. Now, you told us they were ground very accurately. To what tolerances are they ground in diameter?

A. About nine-hundred-thousandths of an inch.

Q. What is the approximate size of the opening between the doctor rolls through which the film passes?

A. I can't answer that.

Q. Are the rolls ground absolutely flat across?

A. No. The original ones were, but we found this large volume of bath that comes up and tries to get through them, actually springs those rolls so that the opening is wider in the middle than it is at the ends. It is rather unbelievable that you would
8527 spring an eight-inch cast iron roll, but you do. So that by crowning these rolls, that is, grinding the middle of the roll very, very slightly larger in diameter than at the ends, we offset that tendency to bow and by so doing we have very materially improved the uniformity of coating applied to the film.

Q. Were the doctor rolls that you used to spread the coating—the original equipment used were spreaders or were they a later development?

A. They were a later development.

Q. What was originally used?

A. Doctor knives, which were a knife-like scraper placed on each side of the film, the film passed through and the excess bath scraped off and spread.

Q. What was the effect of introducing the doctors rolls on cellophane manufacture?

A. It gave us much better control. It reduced our wrinkling tendency—the film tended to wrinkle and produce imperfections as it passed through the doctor knives, and with that method of removing the excess baths, with a definite ceiling on speed, we had to do something different.

Q. How thick is the coating put on let's say 300 MST film?

A. Well, of course, you put coating on both sides and we put three grams of coating total on a square meter.

Q. That is, you have 1½ grams on each side?

8528 A. On each side, that is right.

Q. Do you know what that would measure in thousandths or ten-thousandths of an inch?

A. Yes. That would measure about one-hundred-thousandths of an inch thick.

Q. And what is the variation, the standard operating variation of the thickness of coating?

A. We express it as 15 or 20 per cent. variation. I guess that is some place in the neighborhood of a millionth of an inch, if you can prove it.

Q. And I understood you to say it was important that this thickness be uniform throughout the film?

A. Yes.

Q. Now, in your drying operation on the up side of the tower did Dupont introduce any developments that were important in manufacture?

A. Yes. The original towers as designed by Dupont were not effective as to the direction of the air to promote rapid and complete drying. The air just more or less milled around in there and wasn't utilized to its maximum degree, and of course that has been corrected——

Q. What did you do to correct it?

A. Re-designed the tower and directed the air in high speed jets, right at the surface of the film, very carefully regulated
8529 the point of take-off of the solvent-laden air so that we kept the concentration of solvent in the upper part of the dryer to a minimum and so increased the rate of drying or of evaporation of solvents.

By the COURT:

Q. Mr. McCune, as of the present time, do you still have, to use a phrase of Dr. Benger, bugs in your production line?

A. Oh, yes. We haven't gotten rid of all of them. Yes, we have them.

By Mr. MCGLOTHLIN:

Q. Mr. McCune, I believe you said that the mill roll is unwound on one end of the tower up and down and rewound?

A. That is right.

Q. Now, what happens when you get to the end of the mill roll that you are passing through the coating tower?

A. Well, in our first designs we had to shut the tower down and put on a new roll and either drag the new film, the roll from the new film through the tower with a rope, or else glue it to the end of the roll that was being completed. In any case, we had to shut the tower down.

Q. What happened to the film in the tower at the time of the shut-down?

A. It was wasted.

Q. How do you handle the problem now?

A. We have what we call the flying mend wherein ad-
8530 hesive is applied to the end of the new roll and also to the

end of the roll just being completed, and then by passing the two sheets through a set of rolls with the glued surfaces of the sheet together, it automatically adheres and we change rolls without any slowing down or shutting down of tower.

Q. Was that a Dupont development?

A. Yes.

The COURT. Remember how it did not work when we were down there?

Mr. GESELL. I wondered if your Honor would recall.

Mr. MCGLOTHLIN. I was going to ask him whether it always works. It doesn't.

Mr. GESELL. With all the audience standing around we missed it.

The WITNESS. That is one of the bugs.

By Mr. MCGLOTHLIN:

Q. Now, you described the slitting process to us and the speeds. Did Dupont make any developments in the slitting operations of any importance?

A. The development completely, you might say. First, as a German-made machine was purchased, that was purchased, as I recall it, a little before I went to the Cellophane Company. However, it was still there in my experience. Also some domestic made commercial equipment was bought, but we weren't
8531 able to find any machines on the market that would do the job. So Dupont had to develop and build their own machines.

Q. What are the difficulties in slitting cellophane that had to be overcome?

A. They were so myriad that it is difficult to tell where to start.

Q. Well, tell me why you couldn't use a paper slitting machine, for instance?

A. We tried most everything and we found that the best cut was obtained by a so-called sheer cut knife. That was one of the many problems that had to be worked out.

Q. Let me ask you this: Could you push the cellophane through the machine or did it have to be pulled?

A. It had to be pulled or led through the machine.

Q. What difficulties do you encounter if the slitting machine makes tiny nicks in the edge?

A. The sheet breaks very readily.

Q. Do you have any problem with maintaining the surface of the film through a slitting machine, that is, is it something that has to be done?

A. No. The primary problem in slitting after the development of the cut is the development of proper tension control and appli-

cation at the right points, the guiding of the film through the machine. Our slit rolls must be wound up with almost perfect edges, otherwise the edge will be damaged, that is, the film must
8532 be perfectly wound so that one layer of film doesn't extend out beyond the body of the roll edge. Otherwise that becomes damaged and produces a break in the customer's machine.

Q. Well, did Dupont end up with commercial slitting machines or machines of its own development?

A. Machines of its own development.

Q. Now, these various developments you talked about, have they each been a Dupont development?

A. In respect to the slitting machines?

Q. No, the ones we talked about, such as the development of the threaded rolls, the development of the finer control of the hopper, and so forth?

A. Yes.

Q. Does Dupont have any sort of statistical control of its cellophane manufacture?

A. Well, yes, we worked on that. That is a rather newer type of development. It is a means of getting factual information as to quality control to supervision, to operators. It involves the establishment of control charts which are located in the area so that people who are concerned have definite information as to their performance.

Q. How do they help the manufacture of cellophane?

A. By making corrections for the factors in the process that are shown to be out of control by our tests.

Q. Now, you covered all the mechanical improvements
8533 that occurred in the cellophane process during your experience?

A. No, I don't think so. There are many points in the process that have not been worked on and improved. The great multitude of very minor improvements contributed quite measurably to this over-all improvement that I mentioned earlier.

By the COURT:

Q. Mr. McCune, are you familiar with the method of production at Sylvania? If so, is it substantially similar to Dupont's?

A. I am not familiar with it, no.

By Mr. MCGLOTHLIN:

Q. Mr. McCune, you related from time to time changes in the process or improvements in the sense of a co-current casting or treaded rolls. To what extent is it necessary to correlate a change at one point with the remainder of the manufactured process?

A. It must always be done. The extent, of course, varies in various parts of the process, but taking the chemical building as

an example, you can vary one part of the process quite measurably providing you take corrective steps in other parts of the process.

Q. Now, these increases in efficiency you described resulted from a combination of mechanical and chemical factors or from mechanical alone?

8534 A. All these improvements that I enumerated earlier?

Q. Yes.

A. That is the sum total of all developments by research, engineering, design, day to day contribution of operating people, and so forth.

Q. During your twenty years experience, Mr. McCune, how has the quality of Dupont's cellophane changed?

A. It has immeasurably improved. The quality of cellophane when I first saw it—well, for example, the control of thickness of the cast sheet in 1932 was so poor that we couldn't wind the film up in mill rolls without wrinkles. So we resorted to putting sheets of paper, winding sheets of paper in the roll as it was being wound up, in order to reduce this wrinkle tendency. Then as we unwound the rolls those sheets flew all around.

Q. How about today?

A. Today if we were to put those sheets in there, the very fact they were there would damage the film to the extent it wouldn't be suitable for critical uses.

Q. In that connection how big was the wind-up roll on these early machines? How much film did it carry?

A. About 150 pounds.

Q. And what is the standard mill roll in the Dupont procedure today?

A. From 600 to 1,000 pounds.

8535 Q. About how much of production is sold in the form of slit rolls now, Mr. McCune?

A. Slightly in excess of ninety per cent.

Q. Is the proportion sold of slit rolls any measure of quality?

A. Yes.

Q. How so?

A. The slit rolls are very largely a continuous sheet. That entire sheet must be free of defects if that is at all possible. Also to form a slit roll the thickness must be uniform. Otherwise the very winding of the roll damages the film, as I have indicated—the very winding of the film in the roll damages it. Whereas in sheets we have largely a sorting operation, we can throw out defects, and, as a matter of fact, our sheeting operation today is largely a salvaging operation, whereas in 1932 we had quite some difficulty in getting fifty per cent. of our film into the slit roll form.

8536 Q. Would the 50% that you got in 1932 be salable today under Dupont quality of slit rolls?

A. Not very much of it.

Q. Now you have talked about a number of developments in the manufactured process, Mr. McCune. Will you tell us what the main factor has been in making these improvements? Have you been seeking lower cost, to improve quality, greater capacity, or what? What has been your prime aim?

A. What has been the prime aim?

Mr. McGLOTHLIN. That's right.

The COURT. To make money.

The WITNESS. That is an important factor; but to do that we needed to increase our markets, broaden our markets. We had to displace existing flexible wrapping materials in some cases. In other cases we wanted to wrap materials that had not been wrapped before. To displace these other flexible wrapping materials and compete with them, we had to improve our quality. To enable the customer to process the film and get it on his packages at high speed and economically, we had to improve our quality. Likewise we had to reduce our cost. So that the urge, directly answering was the broadening of markets, competition, to make more money.

By Mr. McGLOTHLIN:

8537 Q. What tests did you have or does Dupont now have in its plants for the purpose of controlling its quality?

A. Well, they are myriad.

Q. Well, start off with raw materials. Do you make any tests of raw materials?

A. Yes, we do what we call essential material specification analysis on all raw materials.

Q. Are any tests made in the chemical building before the viscose is formed?

A. Yes. Starting with the start of the process, we—well, let us say first that these sampling and testing procedures that I may name a few of are all scheduled, the frequency of sampling is scheduled, in such fashion that we can catch any deviations from the process before they become serious. Now the frequency of sampling and these various tests is not the same, but nevertheless they are scheduled at prescribed times. We sample our caustic solution. We sample our viscose as it is produced and make determinations of index and viscosity and cellulose content, caustic content, and so forth. We sample all of the various baths on the casting machine, the coagulating bath, the——

By the COURT:

Q. These are all orthodox procedures in any manufacturing plant?

A. Yes.

The COURT. I don't get the point of this line of
8538 testimony. All the other has been very interesting.

Mr. MCGLOTHLIN. All I am trying to establish, your Honor, is the extent of the control and tests to maintain the quality which is necessary. I can perhaps shorten it.

By Mr. MCGLOTHLIN:

Q. Take the finished film after it comes off the machine. What inspections and tests are made there?

A. The finished film is inspected for softener,—is analyzed for softener content, for moisture content, for uniformity of thickness. The coated film is analyzed for coating thickness, permeability, and physical properties such as slip, and so forth. And then many physical tests are run, to control the——

Q. What is done, Mr. McCune, with film that fails to meet the Dupont quality standard under these tests you have described?

A. That goes into either waste or second quality product.

Q. How many employees does Dupont have approximately in its cellophane plant?

A. It is upwards of 4,000.

Q. How many lost time accidents has Dupont experienced in the last two years among those men?

A. One.

By the COURT:

Q. How many?

A. One.

8539 Q. In what length of time?

A. Two years.

By Mr. MCGLOTHLIN:

Q. Are there dangerous elements in the cellophane process?

A. Yes.

Q. Does Dupont have a safety program?

A. Very definitely.

Q. What effect do you think it has on the productivity of your plant?

A. I think undoubtedly it has a great effect. I don't know how to measure it, but our experience is that it has a very definite effect. I think it is really a measure of efficiency, in one way.

Q. As part of your duties have you from time to time had to do with tests of Sylvania moistureproof film?

A. I have not had to do with tests. I have seen results of tests.

Q. You receive the reports of tests?

A. That's right.

Q. Speaking now up to 1946, how did Sylvania moistureproof film compare with Dupont moistureproof film, as to quality?

A. Dupont moistureproof film was generally better than Sylvania, according to the tests that I observed.

8540 On occasions the reverse is true, on individual items of quality.

Q. What is the situation today?

A. I think Sylvania has made some rather rapid strides, from what I have observed. I don't think the gap is as wide as it was.

Q. What use did you make of these reports of tests that you got on Sylvania film?

A. Well, they were quite some incentive to us to try to better ourselves and, well, we didn't like to be second in anything.

Q. Did you work on quality only when spurred by these reports of Sylvania?

A. Oh, no. No; that was a constant, continuing process, the matter of working on quality and costs,—general improvement.

Q. How did the improvement of quality fall within your own duties?

A. Well, in the plants it was my responsibility directly then.

Q. In the plant you were then managing?

A. Yes.

Q. How about today?

A. Here it is less direct, but nevertheless just as real.

8541 Q. Mr. McCune, in planning an expansion of productive capacity in cellophane, what range forecasts of demand are used?

A. Just as short range as we can. Now the length of time that we have is of course dependent upon how long it is going to take us to make this expansion when we have to start. Pre-war, it required us about 18 months to get a plant going. Now it is probably double that. But although we do attempt to make long range forecasts and look at them, we plan our actions on just as short a range as we can.

Q. Well, you say as short a range as we can. What would that be in terms of years?

A. Well, right now, if we were going to build a plant and we would decide that today, it would probably be three years before we would get through.

Q. And you would use a forecast of that length?

A. Yes. You would have to. You have no alternative.

Q. Were you involved in planning for post-war expansion of production in cellophane?

A. Yes.

Q. Was that conducted prior to the end of the war? That planning?

A. Well, during the war we were following sales estimates of their post-war sales and we were developing plans to expand accordingly. There was no actual activity, however,
8542 until after the close of the war.

Q. Why did you start planning during the war?

A. So that we could get our construction started at the earliest possible moment that such was practical. As a matter of fact, we were thinking prior to the outbreak of the war of planning a further expansion, and I think there is every reason to believe that that expansion would have been made earlier had we not been interrupted by the war. That can be anybody's guess.

Q. Was the post-war expansion of production by Dupont accomplished largely in existing plants or by the installation of additional casting machines?

A. We constructed eight new casting machines at Clinton and, as I recall it, the capacity that we expected to get out of those at the time of the project was about 28,000,000 pounds.

Q. Mr. McCune, has there been any transfer of manufacturing information to Sylvania within your experience?

A. No.

Q. I believe you said you were not familiar yourself with the Sylvania process; is that correct?

A. I am not.

Q. Mr. McCune, the complaint charges that with the intent of forestalling access to the industry by potential competitors Dupont expanded its facilities. What have you to
8543 say to that?

A. Would you repeat that, please, sir?

Q. With the intent and effect of forestalling access to the industry by potential competitors, the defendant has constantly expanded said facilities in an effort to satisfy increasing demands.

Mr. MINICUS. I object to that question, your Honor.

The COURT. It is your complaint, isn't it?

Mr. MINICUS. It is my complaint, but there has been no predicate made in any of the questions yet to show that the witness has any idea of what the intent of expanding production was. There has been no showing that he is engaged in any of the meetings at the policy level of the corporation.

The COURT. I was about to ask him that question. I will ask it now.

By the COURT:

Q. Who is next in command, higher than you? Whom are you responsible to?

A. The position?
Q. Yes.
A. The director of production and assistant director of production:
Q. You are the assistant director of production?
A. I am the production manager.
Q. Then whom are you responsible to? Not whom the
8544 assistant is responsible to, but whom are you responsible to?
A. To the assistant director of production.
Q. Oh, to the assistant director of production?
A. Yes.
Q. I can not get that straight yet. You are the head of production?
A. Yes.
Mr. McGLOTHLIN. He is production manager for film, you see. The department has other products.
The COURT. I see. I understand it now.
8545 The COURT. Now, wait. We have a pending question and a pending objection. I think you have a point there, Mr. Minicus. So far it has not been shown that it is within the province of Mr. McCune to fix policies or production or to fix estimates.
Mr. McGLOTHLIN. I will lay a foundation.

By Mr. McGLOTHLIN:

Q. Mr. McCune, what participation have you had in proposing expansions or planning expansions?
A. Expansions are based on sales estimates, or estimates made by the Sales Division, as to the volume of film that they are going to be able to sell in a given period.
We take those estimates and formulate plans for obtaining that added capacity. Through the Engineering Department we obtain estimates, order of magnitude estimates of the cost of making such expansion or installation and of responsibility in initiating projects for presentation to departmental management covering such expansion.
Q. In the statement of such projects are you required to state reasons for the expansion?
A. Yes.
Q. Have those reasons ever included forestalling access to the industry by potential customers?
A. No, sir.
8546 Q. Have you ever heard in any disoussion as to expansion the purpose of forestalling potential competitors?
A. No, sir.
Mr. McGLOTHLIN. Your witness.
Mr. MINICUS. We have pending a conference with the Court.

Mr. GESELL. Could we wait just a minute.

Mr. MINICUS. I thought he said it was my witness.

The COURT. I beg your pardon?

Mr. MINICUS. Did he say it was my witness?

Mr. McGLOTHLIN. I withdraw that for just a minute, if I may confer just a second.

By Mr. McGLOTHLIN:

Q. Mr. McCune——

The COURT. If you are going into a new line, I suggest we go into the library and take up that other matter.

Mr. McGLOTHLIN. I think I can end this with two or three questions.

By Mr. McGLOTHLIN:

Q. In these planning for expansions, did you participate in conferences?

A. At the department level, yes—or the then Cellophane Division level, I am sorry.

Q. Representatives of what other phases of the activity were there, in addition to yourself as production?

A. Sales Control, Engineering, Plant representatives.

8547 Q. In these meetings did you ever hear a suggestion that production should be curtailed or expansion proposed to create a cellophane shortage?

A. No.

Mr. MINICUS. Objection, your Honor, on the same grounds as the other objection—I mean, the fact that there were conferences, with no indication as to who were at these conferences, what the level of management was that participated in these conferences.

The COURT. Objection sustained.

You can complete your examination tomorrow morning.

Mr. McGLOTHLIN. All right.

The COURT. Let's go in the library now.

(At this point the trial was adjourned to Friday, March 28, 1952, at 10 o'clock, a. m.)

8548 FRIDAY, MARCH 28, 1952, 10:00 O'CLOCK, A. M.

Present: As before noted.

JOHN FRANCIS McCUNE (resumed).

Direct examination by Mr. McGLOTHLIN (cont.)

Q. Mr. McCune, the transcript at page 5577 indicates that in response to a question as to whether your testimony had covered all developments in the process during your experience, you replied "No, I don't think so; there are many points in the process that

have not been worked on and improved." Is that your testimony?

A. No. That would be better worded there "A few points in the process that have not been worked on and improved."

Q. Mr. McCune, I believe you told us that you were a plant manager for the period of 1934 to 1944; is that correct?

A. Yes.

Q. Now, as plant manager what was your function and responsibility as to improvements and developments in manufacturing?

A. My responsibility was to apply improvements and developments to the plant for which I was responsible. In so doing through my technical group and operating group we both
8549 made developments and applied the developments to other plants in the Technical Division.

Q. Did you have any responsibility, and if so what, as to recommending what improvements and developments should be made in the plant of which you were manager?

A. Yes.

Q. What was your responsibility?

A. That responsibility was to prepare proposals or projects with their estimated cost and to recommend the application.

Q. From you as plant manager to whom did that recommendation go?

A. To the Director of Production's Office.

Q. To the Director of Production of what?

A. Of films.

Q. Of the Cellophane Division?

A. Of the Cellophane Division, yes.

Q. And the Cellophane Division was a section of what department?

A. Of the Rayon Department.

Q. And when was cellophane changed from a section of the Rayon Department?

A. In 1950 it was made a separate department.

Q. When you made a recommendation for an improvement or development in manufacture in the plant of which you were
8550 manager during this period 1934 to 1944 what was your purpose in recommending the work?

A. To reduce cost, improve quality, improve working conditions.

Q. Did you have any other purpose?

A. No.

Q. You became Production Manager in 1944; is that correct?

A. That is.

Q. For the period of 1944 to 1950 what was your status as production man in cellophane?

A. I was head of the cellophane production organization.

Q. You referred yesterday to directors and assistant directors of production of the Film Department. When were those offices created?

A. In 1950 when the separate department was established it was organized on a functional basis, whereas prior to that it had been on a product basis.

Q. Is it correct, then, that for the period 1944 to 1950 you were the top production man concerned with cellophane below management proper?

A. That is right.

Q. As production manager during that period, what were your responsibilities as to major expansions in capacity?

A. When decision had been reached by management as
8551 to the desire to mount or volume of production increase, it was then my function to work with the plants and with the technical division in determining how that volume of increased production could best be obtained, whether by building of new plants, whether there were in proper stage of development technological improvements that could be applied to existing plants to obtain those improvements. In case there were such technological developments, we worked with the plants and developed basic data covering the proposed design, presented that to the engineering department, design division, for order of magnitude estimate, and then worked with management, with the sales division and control division, technical division, and others, in preparing the final recommendation.

Q. Now this final recommendation,—did you consult with others in the course of preparing the final recommendation?

A. Yes.

Q. What was the top rank sales person with whom you conferred or consulted in connection with the recommendation?

A. The director of sales.

Q. The director of sales for what?

A. For cellophane.

Q. Cellophane division?

A. Yes.

Q. And what was the top rank management person with whom you consulted in connection with the recommendation?

A. The division manager of the cellophane——
8552 Q. The manager of the cellophane division?

A. That is correct.

Q. Now after this group made the recommendation, where did it go? To whom was the recommendation made?

A. It went to the general manager of the rayon department at that time.

Q. At the level with which you were concerned, the manager of the cellophane division, the director of sales, yourself, the engineering people, I believe you mentioned, and the technical people, did you ever hear the desire expressed to expand so as to have capacity that would be idle?

A. No.

The COURT. I did not get the significance of that last question.

Mr. MCGLOTHLIN. That is to meet the charge, your Honor, that we attempted to overhang the market and thereby discourage competition.

By Mr. MCGLOTHLIN:

Q. Did you ever hear the suggestion that expansion should be limited or abandoned in order to create a shortage of cellophane?

A. No.

Q. Did you ever hear a desire to forestall or discourage competition as a reason of expansion?

A. No.

Q. Were these things ever your own personal reasons?

8553 A. No.

Mr. MCGLOTHLIN. Your witness.

Cross-examination by Mr. MINICUS:

Q. If I understood your testimony, Mr. McCune, of just a few moments ago, you stated that management had made the decision to expand before it was referred to you; is that correct?

A. That is correct.

Q. Therefore whatever policy considerations were basing this expansion, they were decided before they were referred to you; is that correct?

A. That is correct, yes.

By the COURT:

Q. To clear that point up in my mind, any such decision was made, am I to presume, on data which you had given them?

A. Partially, and partially on data obtained elsewhere.

Q. I see.

A. Such as sales data.

By Mr. MINICUS:

Q. You did testify, however, Mr. McCune, that the original impetus for this expansion originated with management?

A. I think that is correct, yes.

Q. And is the production section of the then cellophane division considered part of management?

A. Yes.

8554 Q. There is no distinction between production and management?

A. As to level and type of responsibility, yes.

Q. Well, when you stated that the original expansion originated with management did you mean to testify that in these original policy considerations the production people were also in the conferences that decided them?

A. Quite frequently, yes.

Q. Did you ever sit in on a conference that was considering the original stages of expansion?

A. By original stages you mean——

Q. When the question of expansion first came up.

Mr. GESELL. Your Honor, he has cut the witness off in the middle of an answer.

The COURT. Strike the question and answer, Mr. Reporter.

Start again, Mr. Minicus.

Mr. MINICUS. Thank you, sir.

By Mr. MINICUS:

Q. When first consideration was being given to a matter of expansion were you in attendance at any of the conferences that were considering that matter of expansion or did you receive a request for recommendation after it was decided to expand?

A. I have been in attendance when it was being con-
8555 sidered.

Q. At its initial stages?

A. To the best of my knowledge, yes.

Q. And there were no instances, Mr. McCune, at which a determination had already been made by top management to expand before you were asked for your opinions on it?

A. Not to my knowledge, no; during the period that I was in a position of being in charge of production in Wilmington.

Q. Were you in such a position in March of 1929?

A. No.

Q. Were you in such a position in May of 1939?

A. No.

Q. When was the first time that you were in such a position, Mr. McCune?

A. About October 1944.

Q. October 1944? When was the second cellophane plant constructed, Mr. McCune?

A. The second cellophane plant?

Q. Yes. We had one at Buffalo originally. What was the next one?

A. I believe it was about 1928.

Q. Were any new cellophane plants constructed after 1944?

A. There was an eight-machine addition constructed at
8556 the Clinton plant after 1944.

Q. That is the only new plant construction there was subsequent to the time that you were in a position to participate in policy matters; is that correct?

A. Yes.

Q. That was at the Spruance plant?

A. That was at the Clinton plant.

Q. Was there some increased capacity installed at Spruance in 1945?

A. No.

Q. Was there an application made for an appropriation for increased plant capacity at Spruance in 1945?

A. I can't testify as to the exact date of the application. I think it was later, however.

Q. There was an application being considered at or about that time?

A. That is correct.

Q. I have reference, Mr. McCune, to Government's Exhibit No. 132 dated April 25, 1945. The final paragraph of that exhibit reads as follows:

"As an aid to maintaining our competitive position post-war we are submitting this project at this time to be in a position to start construction as soon as possible under Government regulation."

8557 The COURT. Just a minute, Mr. Minicus. Don't you think that you should identify that exhibit? This witness does not know what it is. Tell him what it is, who wrote it, and who is the addressee.

Mr. MINICUS. Gladly, sir.

By Mr. MINICUS:

Q. This, Mr. McCune, is a report from the Rayon Department to the Executive Committee and it is headed "Project No. 395, Part 2, $469,000 Increased Capacity, Spruance Cellophane."

Now, did you make any recommendation in connection with that expansion?

A. Yes.

Q. Did the recommendation come from you that this expansion be made as an aid to maintaining the Company's competitive position?

A. Not directly, no.

Q. Not what, sir?

A. Not directly, no. Not as such.

Q. Was it made by you indirectly?

A. I concurred in it.

Q. Didn't you testify a few moments ago that you did not consider the competitive position of the Company in making recommendations for expansion?

Mr. McGLOTHLIN. He didn't so testify, your Honor. I object to the question.

8558 The COURT. I don't recall such testimony.

By Mr. MINICUS:

Q. Did you not testify, sir, that in making your recommendations, you never considered suggesting increased capacity for the purpose of forestalling competition?

A. I did.

Q. Is one of the methods by which competitive position can be maintained the forestalling of competition?

A. I think that is a very roundabout course of reasoning.

Q. Will you answer my question, sir?

A. Will you state your question again?

Mr. MINICUS. Will you read the question, Mr. Reporter, please?

(The question was repeated by the reporter.)

The COURT. I don't understand that question. Read that again, will you, please, Mr. Reporter?

(The question was again repeated by the reporter.)

The COURT. Why don't you try to rephrase that, Mr. Minicus? I don't understand that question.

By the COURT:

Q. Do you understand it, Mr. Witness?

A. I do not, no.

By Mr. MINICUS:

Q. You did testify, sir, that you never considered, in making your recommendations for expansion, the possibility of the expansion forestalling competition in this industry?

8559 A. I just don't think that way.

Q. This document states, sir, that this expansion is to be made as an aid to maintaining the company's competitive position.

Mr. McGLOTHLIN. It does not say that, your Honor. It says an aid to maintaining our competitive position post war, we are submitting this project at this time. The reasons for the project are stated in the earlier paragraph that Mr. Minicus has skipped.

By Mr. MINICUS:

Q. Do you know what the competitive position of the Dupont Company was in viscose cellophane in 1945?

A. In what respect? I don't understand that question. Volume-wise or what?

Q. In pounds of production, Mr. McCune.

A. No, I can't state a specific figure at this time.

Q. Can you state an approximate figure?

A. I can give a guess. We probably had some place in the neighborhood of seventy per cent of the volume.

Q. Some place in the neighborhood of seventy per cent of the volume?

A. Yes.

Q. In making your recommendation in support of this expansion, did you support the recommendation with the idea in mind of maintaining approximately seventy per cent of the

8560 volume?

A. That particular objective did not enter my head at the time, no. I had no such figure in mind.

Q. You attended the conferences relative to this?

A. Yes.

Q. Did you hear anybody mention it?

A. Not to my recollection, no.

Q. Then how did it get into the report, Mr. McCune?

Mr. McGLOTHLIN. Your Honor, it is not in the report.

Mr. GESELL. The witness has not got the report neither.

Mr. MINICUS. I have read the report to the witness,—as an aid to maintaining our competitive position post war—that is certainly in the report.

Mr. McGLOTHLIN. And it continues in the same sentence——

Mr. MINICUS. Is there an objection, sir? If there is, I did not get it.

Mr. McGLOTHLIN. There is an objection to misuse of the exhibit. Let the witness see the exhibit.

Mr. MINICUS. I certainly will.

The COURT. Go ahead; just let him have it.

By Mr. MINICUS:

Q. The paragraph I have in question, Mr. McCune, is the final paragraph. If you desire to peruse the entire exhibit, you are welcome to it.

8561 A. Yes. Now what was the question?

Q. I simply desire to know, Mr. McCune, whether or not any recommendation you made at any of the conferences preceding this expansion resulted in that final paragraph.

A. No, I never made any recommendations that were phrased in such manner.

Q. Did you make any recommendations that had that thought in it?

A. Sure, we wanted to maintain our position in the industry.

Q. Of approximately seventy per cent of the production?

A. No such figure in mind, no.

Q. Was that your position in the industry?

A. Yes.

Q. Is that the position you wanted to maintain?

A. We didn't think of it in that way, no. We had no figure in mind that we were going to shoot at or maintain. At least I didn't.

Q. You said, you testified, sir, that you supported the thought contained in this final paragraph.

A. That's right.

Q. What was the competitive position you desired to maintain when you made that recommendation?

A. I don't remember of ever hearing it defined.

Q. Do you know how it got into this report?

A. Yes.

8562 Q. How did it get into the report, sir?

A. It was put in there by, I believe, division management.

Q. And discussed at the conferences prior thereto?

A. I think so.

Q. Do you know?

A. My recollection is not quite that specific, no.

Q. Then you don't remember whether competitive positions were ever discussed in these expansion conferences?

A. Yes, they were.

Q. Then competitive position was considered when expansion of plant facilities was under discussion?

A. Yes.

Q. And prior to 1944 you have no knowledge of whether competitive position was considered in those conferences?

A. No.

Q. And there was only one expansion of that nature of increased plant facilities after 1944?

A. Of building of new plants, yes.

A. Did you testify yesterday, sir, that in your opinion Dupont's dominant position in the cellophane industry was attributed almost entirely to the superiority of its product?

Mr. McGLOTHLIN. Could we have a reference to such testimony? I don't recall it.

The WITNESS. I don't think I made such testimony.

8563 The COURT. Let us find it. Before you answer the question, we want to see where that testimony was. I have no recollection of it.

Mr. MINICUS. It is my recollection——

The COURT. Well, let us see the record.

Mr. MINICUS. That Mr. Gesell stated that the witnesses' entire testimony yesterday would be directed towards this point.

Mr. GESELL. Your Honor, if I use the word dominant yesterday in connection with that, I would be very much surprised, because I said no such thing.

The COURT. I would not expect you to.

Mr. GESELL. No.

Mr. MINICUS. The word dominant is not there, your Honor. The statement was, it is our contention that Dupont's——

Mr. MCGLOTHLIN. Could I have the page, your Honor?

Mr. MINICUS. Page 5465.

Mr. MCGLOTHLIN. Your Honor, page 5465 appears in the testimony of Mr. Mitchell.

Mr. MINICUS. The statement is directed towards the entire research and engineering policy of the program, your Honor.

The COURT. Well, let us not deal in these generalities. If you have something in that testimony which you want to address to this witness, read the material in the testimony and let him give his version of it. Let us be precise.

8564 By Mr. MINICUS:

Q. Did your testimony yesterday support the following position, Mr. McCune:

"It was our contention that Dupont's research was conducted for proper motives, and the skill of its appliances and techniques in large part account for the Company's position in cellophane."

A. It did.

Q. That is your position, sir?

A. It is.

Q. And what did you say the Company's competitive position in cellophane was?

A. I think it happened to be about seventy per cent. at the time. That is my guess.

Q. Would you say that was a dominant position, sir?

Mr. MCGLOTHLIN. That is a question of law, your Honor.

The COURT. Do you object?

Mr. MCGLOTHLIN. I object.

The COURT. Objection sustained.

By Mr. MINICUS:

Q. Your testimony then went on to detail numerous engineering improvements which were incorporated into the cellophane process and that many revolutionary ideas were developed within the Dupont Company for the main purpose of im-

8565 proving the quality of the product. Is that true, sir?

A. I don't think I used the word "revolutionary."

Q. I am in effect—You don't testify, then, that these improvements were in any way revolutionary?

Mr. MCGLOTHLIN. Could we have a definition of "revolutionary"? I object to the question.

Mr. MINICUS. I think language has a pretty common meaning, your Honor.

Mr. McGLOTHLIN. You can't tell what it means here, your Honor.

The COURT. I think as a matter of semantics when you use a word you should make it in relation to some definite fact. Now, revolutionary as to what, Mr. Minicus?

Mr. MINICUS. The practices that had been followed prior thereto.

The COURT. Explain it in that fashion to the witness. He may be able to give us some help.

The WITNESS. In my testimony, as I recall it, I said that the process as I found it in 1932 was sound, that it needed improvement, and we did improve it. My definition of "revolutionary" would indicate a change in basic fundamentals, and we did not do that.

By Mr. MINICUS:

Q. You did not change any basic fundamentals?

A. Not as I considered the basic fundamentals of the
8566 process, no.

Q. That is from 1932 to date, sir?

A. That is right.

Q. What sort of changes did you effect?

A. Improved methods, improved——

By the COURT:

Q. Knocking out the bugs?

A. Improved concentrations, controls.

By Mr. MINICUS:

Q. Improvements and developments in mechanical skills?

A. Mechanical and general operating procedures.

Q. And from those improvements you were able to develop a quality of product that accounted for Dupont's position in the industry; is that correct, sir?

A. I don't know whether it accounted for Dupont's position in the industry. It certainly did account for the volume of product that we produced and sold.

Q. Didn't you testify just a few moments ago, sir, that Dupont's quality was largely attributable for its position in the industry?

A. Yes.

Q. Now, among some of the engineering developments and improvements that you discussed yesterday was the coating tower for cellophane. How high did you testify that tower was, Mr. McCune?

8567 A. I said six stories.

Q. What is the advantage of a tower six stories high in the coating process, Mr. McCune?

A. You have a certain amount of work to do, so you size the equipment accordingly.

Q. Could you approximately estimate the height of that in feet?

A. It would be a guess. I would guess somewhere in the neighborhood of 55 to 60 feet.

Q. 55 to 60 feet, sir?

A. I think so. That is a guess.

Q. Is this tower an important stage in the entire process of producing moistureproof cellophane?

A. Yes. It is the means by which we do it.

Q. Yet hasn't there within the last few years been under consideration within the Dupont Company a process which will dispense with the use of this tower?

A. There has been under consideration a new and improved product which would be produced on a different type of equipment.

Q. And you would not use the tower for that product; is that correct, sir?

A. That is right.

Q. And if you did not use the tower you would be doing it on a horizontal level; is that correct, sir?

8568 Mr. McGLOTHLIN. I object to the question on an erroneous assumption. He testified as to one product, as I understand it, your Honor, not the complete——

By Mr. MINICUS:

Q. Would there be any difference between the new product and the way in which it was manufactured and the horizontal process used at Fredericksburg?

Mr. McGLOTHLIN. The witness has testified he does not know what is used at Fredericksburg, your Honor.

Mr. MINICUS. Your Honor, am I to be permitted to conduct a cross-examination? I know what the witness has testified to. I think that question was highly improper.

Mr. McGLOTHLIN. I agree the question was improper.

The COURT. Mr. Reporter, will you give me the question?

(The following question was read by the Reporter:)

"Question: And if you did not use the tower you would be doing it on a horizontal level; is that correct, sir?"

The COURT. What has this got to do with this case, whether there is a tower or there is not a tower?

Mr. MINICUS. That was the entire discussion in his testimony yesterday, your Honor.

The COURT. What are you trying to bring out? I want help. I can't follow it.

8569 Mr. MINICUS. I am trying to develop whether the tower process is sufficiently important that they have to continue with it or whether they are going to dispense with it.

The COURT. So what? What has it got to do with the issue of whether there is an illegal monopoly in this case?

Mr. MINICUS. I am now testing the witness' evidence. He has made certain statements with reference to these things and we are trying to find out where they are leading us. We objected to the materiality right at the beginning of his testimony, your Honor, but I think I should have the right, if he has testified at great length about this tower, to question him about the tower.

Mr. MCGLOTHLIN. I have no objections to questioning about the tower. My only objection is to Mr. Minicus' statement that a horizontal process was used at Fredericksburg. I think there is no evidence of that in the record.

Mr. MINICUS. Mr. Gesell at the beginning of this case informed the Court and counsel here that Sylvania did not use a tower in its process.

Mr. MCGLOTHLIN. I said I think there is no evidence in the record.

The COURT. I am trying awfully hard to get the point and I haven't got it whether there is a tower or not.

Read the question again.

8570 (The following question was read by the Reporter:)

"Question: And if you did not use the tower you would be doing it on a horizontal level; is that correct, sir?"

A. If we were not using a tower I don't know what we would be using. I think that I stated at the outset of my testimony in regard to the tower that the tower is the form of equipment used by Dupont.

Now, I don't know anything about forms used by other people. I do recognize, however, that in any of the equipment I described that I was discussing Dupont's designs, which we think are adopted for good and sufficient reasons. I recognize that those could be changed quite extensively.

By Mr. MINICUS:

Q. It is your definite testimony, Mr. McCune, that you don't know whether or not Sylvania uses a tower for coating at Fredericksburg?

A. No, I don't know. I have heard that they did not. I don't know whether they do or not.

Q. You have been told that they did not?

A. I have heard that they did not use a tower, that they have a horizontal machine. I don't know that. I never saw it.

Q. Have you ever been to Fredericksburg?

A. No.

Q. Have you ever driven to Richmond from the north?

8571 A. Yes, passed through.

Q. You have passed through Fredericksburg?

The COURT. When I drove I didn't pass through Fredericksburg.

The WITNESS. I don't think I did.

The COURT. You are about eight miles to the west of it.

By Mr. MINICUS:

Q. Have you ever driven within eight miles of Fredericksburg on your way to Richmond?

Mr. MCGLOTHLIN. Your Honor, I object. I can't see any relevance to this.

A. I don't know whether I have or not. I passed through Fredericksburg on the train and I never got off the train.

By Mr. MINICUS:

Q. You have never driven through or near Fredericksburg?

A. Not to my recollection, no.

Mr. MINICUS. Your Honor, the witness has told the Court that he has absolutely no familiarity with the Sylvania process. He again testified in response to questions of his own counsel that he had absolutely no familiarity with the Sylvania process. He has testified that he has been in the production of cellophane for over twenty years, that since 1944 he is the top production man

8572 in the cellophane operations of the Dupont Company. The Dupont Company is the largest producer of cellophane in the United States. There is only one other producer of cellophane in the United States. I submit that we have a right to check the credibility of that statement, your Honor.

The COURT. You have been checking it all morning.

Mr. MINICUS. But I have been constantly interrupted, sir.

The COURT. Continue. Now let this be understood. If Mr. McGlothlin is of the view that he has a valid, legal objection, he is performing the function of an advocate, and every lawyer must stand the irritation of being interrupted if his opponent thinks that he is not making an accurate statement. Now I have not said that you have made inaccurate statements, but I think the role of each of you should be understood in this court room, that there is to be no limitation or restriction on any attorney to voice his objection to any evidence which he thinks is invalid. Not let us proceed.

Mr. MINICUS. I submit, your Honor, however, that when I was cross-examining the witness on this point and Mr. McGlothlin

rose to remind the witness or to direct the witness' attention to what his testimony has been on the previous day, when it was the very statement that was under consideration, I think the statement was improper.

By Mr. MINICUS:

8573 Q. You have never then seen the plant at Fredericksburg, sir? Have you ever seen pictures of that plant?

A. None that are impressed on my mind, no There may have been some articles that appeared in some magazines that I saw. If that is true, then maybe I have seen some pictures.

Q. If you had seen such pictures, would you have noticed the tower six stories high?

A. But I can state definitely I never saw a picture of the coating machine.

Q. Could that have been because it was not there, Mr. McCune?

A. To the best of my knowledge, they produce—I know that they produce moisture proof cellophanes. They must have a machine to do it.

Q. That is not exactly the point, sir. Do they use a tower to do it?

A. I have heard that they do not, no. I have never seen any designs, nor have I been in the plant.

Q. What were the circumstances under which you heard they did not use a tower, sir?

A. Oh, just discussions. I don't recall the specific circumstances.

Q. You don't know with whom the discussions were?

A. Yes. Members of our own organization.

Q. Knowledge that is acquired through discussions with
8574 members of your organization, Mr. McCune, does that knowledge constitute part of the sum total of all your knowledge of this industry?

Mr. GESELL. Conceded.

The WITNESS. Will you repeat that question?

By Mr. MINICUS:

Q. Everything that you have learned about this industry, has it been learned through visual observation?

A. No, not everything.

Q. Is part of your knowledge of this industry comprised of facts that you have learned through being told about them?

A. Through being told about them? I expect so, yes.

Q. And you were told that Sylvania did not use the tower in its coating process?

A. Yes.

Q. Then you had some reason to believe that Sylvania did not use the tower in its coating process?

A. I expect you can say that.

Q. And when you told the Court yesterday that you had no familiarity with Sylvania's process, you had reason to believe that Sylvania did not use a tower in its coating process?

A. When I told the Court yesterday——

The COURT. The question I put to the witness yesterday was this,—do you know whether or not the process used by Sylvania is substantially similar to that of Dupont? Now
8575 you are taking one segment of my question, namely, the tower. I wanted to know if he knew the whole process and could put one in juxtaposition with the other. That is what I was after.

Mr. MINICUS. The witness has testified that the tower is a very important ingredient in the process, your Honor.

The COURT. Proceed.

By Mr. MINICUS:

Q. Will you state once more, sir, your present capacity with the Dupont Company.

A. Film production manager.

Q. Is it among the duties of your position, sir, to keep abreast of new developments in mechanical and engineering skill that are taking place in your industry?

A. Yes.

Q. Have you done that, sir?

A. I wouldn't know how to measure that. I don't know.

Q. If a new development in process had been undertaken at the Sylvania plant, would you not be interested in ascertaining of its existence?

A. Yes, sure I would.

Q. Did you ever make any effort to ascertain any new developments in process or engineering at the Fredericksburg plant?

A. No, I didn't. Not any definite—we discuss——
8576 Q. Discuss what, sir?

A. We discuss the matter, but we make no effort to learn their secrets.

Q. Who participates in these discussions?

A. Whoever happens to be around.

Q. Did you ever discuss them with any Sylvania personnel?

A. No, sir.

Q. Have you ever had any discussions with any Sylvania personnel?

A. No.

Q. You have never met them at conventions or business meetings or anything of like nature?

A. Not to my recollection.

Q. But you do have good reason to believe that Sylvania does not use a tower in its coating process?

A. It is all hearsay.

Q. Are you familiar with any major alternatives for the production of viscose for cellophane other than the method you described the other day?

A. You are referring to methods in use?

Q. Methods of the production of the viscose for cellophane.

A. No, I am not familiar with any methods that are in use for the production of cellophane viscose.

Q. You are familiar with the Dupont method?

A. Yes.

8577 Q. Do you know of any alternative methods?

A. None that are in use, no.

Q. Do you believe there is an alternative method for the production of viscose for cellophane?

A. An alternative method could be developed, yes.

Q. Do you believe that Sylvania uses an alternative method for the production of viscose for cellophane?

A. I don't know.

Q. You have no knowledge of how the viscose is produced? Have you ever discussed this with anybody, Mr. McCune?

A. I can't remember of having discussed that particular point with anyone. I may have.

Q. If Sylvania had such a method, would it not be part of your duty to learn what this new method might be?

A. No.

Q. Then it is not part of your function to keep abreast of new engineering developments in the cellophane field?

A. It is not part of my duties to steal somebody else's equipment, no.

Q. I don't believe, sir, that I mentioned stealing it. Is there no other way of acquiring engineering knowledge than stealing it?

A. It is a form of pilfering, I think.

Q. All the engineering knowledge that you have accumulated, you don't mean to tell me you have stolen?

8578 A. As I understand it, we are talking about a specific product and a specific process. Now engineering designs to accomplish that process, yes, but not the full coverage of design of some specific company's process. That is a different problem.

Q. Assuming for a moment that the Sylvania Company invented a new machine used in the manufacture of Cellophane and

patented it, would you feel free to go down and look at the patent in the Patent Office?

A. Oh, yes.

Q. Would that be stealing it?

A. No.

Q. Have you done such things to keep abreast of the Sylvania developments?

A. I have not personally, no.

Q. Has anybody in the company reviewed any possible patents that Sylvania might have on the processes for cellophane?

A. I can't testify as to that.

Q. If they had, a production manager would they be apt to report to you?

A. If they were of interest, they possibly would, yes.

Q. Have you ever received such reports?

A. No, I don't remember.

Q. You have no recollection?

8579 A. I don't remember it.

Q. Did you testify yesterday, sir, that the quality of Sylvania film was inferior to that of Dupont's?

Mr. McGLOTHLIN. Could we have a reference to the testimony, sir?

The WITNESS. As I recall my testimony——

Mr. MINICUS. I understand he testified to something, your Honor. If it was not so, all he has to do is to say no.

The WITNESS. As I recall my testimony of yesterday, it was to the effect that in the main, more frequently than not, the reports that I received on examination of Sylvania film showed our films to be superior. In some instances they had superiority. That was the general intent.

By Mr. MINICUS:

Q. With reference to a question addressed to the relative qualities of the film today, did you not testify, "I think Sylvania has made some rapid strides, from what I have observed I don't think the gap is as wide as it used to be"?

A. Yes, I said that.

Q. By that statement did you mean that there was a gap today?

A. Oh, that word gap may have been used a little bit inadvisedly. I don't know. That is a matter of opinion.

Q. Then do you consider Sylvania's cellophane today of equal quality with that of Dupont?

8580 A. In some respects, yes.

Q. In what respects, sir?

A. Well, in moistureproofness, in strength, and I believe in most respects probably except roll formation and some machine running properties.

8581 Q. Then the only characteristics of Sylvania cellophane which you consider inferior to Dupont's are in machine running and roll formation?

A. Well, I can't definitely make that statement, no. I would have to review a little bit before. However, I will say that Sylvania makes a good product.

Q. But it is inferior as to machine running and roll formation at the present time?

A. That is my opinion, yes. Somebody else might have another opinion.

Q. Are there any characteristics in which Sylvania film is superior to Dupont's film?

A. I can't state that definitely current. I know they have been.

Q. You have testified this morning, sir, that the position of the Dupont Company in the cellophane industry is attributable in large degree to the superior quality of Dupont film. Now, is that superior quality to be found only in the roll formation and the machine running?

A. No. I think my testimony is being somewhat misconstrued.

Q. Perhaps you will answer my question, sir.

Mr. McGLOTHLIN. Let the witness finish his answer, your Honor.

8582 Mr. MINICUS. I don't think it is the witness' function to form and state his own opinion of what I am doing to his testimony.

The COURT. He certainly ought to be able to interpret his own testimony. At least have the opportunity to.

Read the last question.

(The last question and answer were read by the Reporter as follows:)

"Question: You have testified this morning, sir, that the position of the Dupont Company in the cellophane industry is attributable in large degree to the superior quality of Dupont film. Now, is that superior quality to be found only in the roll formation and the machine running?

"Answer: No, I think my testimony is being somewhat misconstrued."

The COURT. You proceed, Mr. Witness.

A. (Continuing.) I am not certain as to just what you mean by the position of the Dupont Company. My testimony was to the effect that our increased volume of sales was attributable very largely to our improved quality.

By Mr. MINICUS:

Q. You have testified, sir, that Dupont produces seventy per cent, approximately of the cellophane produced in the United

States today. That is the position we are talking about. I presume you will agree with me that that leaves thirty per cent. for the rest of the industry, approximately?

8583 A. Yes.

Q. You did not mean your testimony then to be interpreted that the reason why Dupont enjoys seventy per cent. of the production of cellophane sold in the United States because it makes better cellophane than the only other producer in the country?

A. That is certainly I believe true in past years. My testimony would indicate that that position may be somewhat in jeopardy due to Sylvania's improvement in quality.

Q. There has been a very recent improvement?

A. Within the last few years, yes.

Q. Beginning when, sir?

A. I don't think you could put a specific date on it. It is a development.

Q. Could you say approximately when you began to notice this improvement in Sylvania quality?

A. Maybe three or four years. That is a guess again.

Q. When counsel addressed the question to you as follows, speaking now up to 1946, "How did Sylvania moistureproof film compare with Dupont moistureproof film as to quality?" you did not intend then for 1946 to be a definite dividing line between poor quality Sylvania and good quality Sylvania?

A. That was not—that was not.

Q. But it has been since 1946 that you noticed this im-

8584 provement?

A. Yes, since I have noticed it.

Q. Since that improvement has become noticeable in Sylvania's quality have you observed greater acceptation of Sylvania film?

A. I am not in a good position to observe that. I am not in direct contact with the trade.

Q. How about the sales people that you said you had conferences with, sir, in the Dupont organization? Didn't they ever mention to you in these conferences "We are losing business to Sylvania," or "We are gaining business from Sylvania"?

A. They have mentioned that, yes.

Q. Mentioned which, sir?

A. That we have lost business to Sylvania.

Q. In the last few years?

A. Yes.

Q. So then it would be safe to say from your testimony that Dupont's participation at the end of 1950 in the total production of cellophane sold was less than it would have been in 1946?

A. I don't know.

Q. You don't know. Now, prior to 1946, sir, would you say that Dupont was making a cellophane that was very much superior to Sylvania's?

8585 A. That leaves open the interpretation of "very much." Sylvania was making a salable product and so were we, and based on customer reaction, reports, and so forth, the customer reactions that I have heard of from Sales, I formulated an opinion which I think is sound. That is that Dupont quality has been superior to Sylvania and that that difference is becoming less.

Q. But there still is a difference?

A. I think so.

Q. Now, during this period in which you say that Dupont's quality was greater than Sylvania, was it very much greater?

A. I just don't know how to answer that question.

Q. You are in the business, sir. How did you measure relative qualities of cellophane?

A. Numerous ways. By laboratory tests, by field tests on the customers' machines, by tests on machines installed in our own technical service laboratory.

Q. In 1936 do you know how long Sylvania had been manufacturing cellophane?

A. In 1946?

Q. 1936, sir.

A. I think they went into the business in the early thirties, but that was just after about the time I became identified with cellophane and I can't place that definitely.

8586 Q. Is it a reasonable presumtion to say six years?

A. Probably so, yes.

Q. And in 1936 how long had Dupont been making cellophane?

A. Twelve years.

Q. Now, have you any knowledge of the relative qualities of those films in the middle and late thirties; that is, Dupont vis-a-vis Sylvania film?

A. Yes, that is part of the time which my testimony covered.

Q. Was Dupont film superior at that time?

A. In my opinion it was, yes.

Q. In what particular characteristics was Dupont film superior at that time, sir?

A. In moistureproofness, in general appearance.

Q. Did you see any tests comparing the relative qualities of the two films during that period, Mr. McCune?

A. I think I—I know I did, yes.

Mr. Minicus. I request, your Honor, that an exhibit entitled "Analysis of Physical Test Data on Cellophane and Competitive Viscose Sheeting for 1936, 1937, and 1938." be marked for iden-

tification and be given the number for identification Government Exhibit 562.

(The paper referred to was marked "Government Exhibit No. 562 for Identification.")

8587 By Mr. MINICUS:

Q. I hand you this entire report with particular reference to the final page of the report. Is it not true that according to a particular standard which we have not discussed yet the relative qualities for specific characteristics of Dupont and Sylvania film are summarized on that last page? You need only answer yes or no to that.

A. They seem to be, yes.

Q. Now will you refer to the third paragraph on the first page of the report after the cover sheet under the heading "General". That is the third paragraph under the heading "General."

A. That is the final paragraph at the bottom?

Q. No, the one before that, sir.

A. Oh, yes.

Q. Does it state there that the summary data have been computed on a percentage basis; namely, taking the average data for Dupont film at 100, the average for Sylvania shown as poorer or better than Dupont expressed as a percentage?

A. Yes.

Mr. MCGLOTHIN. I object, your Honor. The exhibit is not in evidence. He is reading the exhibit to him and asking him if that is what it says. The way to get that in is to
8588 offer it in his own case. He has merely asked him whether this is on a piece of paper. That is the only question. I object.

Mr. MINICUS. The witness has testified that he has seen these tests and these tests were part of his direct evidence, your Honor. They were not offered by the plaintiff.

The COURT. He has a copy of your proposed document?

Mr. MINICUS. He has a copy of the document that I handed him.

The COURT. What are you doing with that document with respect to this witness?

Mr. MINICUS. I am cross-examining his testimony as of yesterday with regard to these tests that he says——

The COURT. Objection overruled. Proceed, Mr. Minicus.

By Mr. MINICUS.

Q. Without getting into specific details, Mr. McCune, unless it is necessary, are there as many measurements in excess of 100 as there are under 100 in this summary on the final page, approximately as many?

A. No, I don't think there are, just on a rough view.

Q. There are quite a few which according to the standard we just read indicate that for that particular characteristic Sylvania is superior, aren't there?

A. And that was included in my testimony, yes, sir.

Q. Then for these years, looking at this summary, sir,
8589 can you tell me where you can derive the information that at that time Dupont film was vastly superior to Sylvania's?

A. We must recall that these are only part of the properties of cellophane. These happen to be certain properties of cellophane. It does not tell the whole story.

Q. But they are Dupont tests, are they not, sir?

A. Yes.

Q. And these tests do not show a clear superiority for Dupont cellophane?

A. They show superiority, I think, in the majority of instances.

Q. For some characteristics, is it not true that on these tests Sylvania cellophane shows a very marked superiority?

A. That is right.

Q. And isn't it true also, Mr. McCune, in the production of cellophane it very often happens that to improve one characteristic you must take a little away from the other?

A. Well, to say you must is—not necessarily.

Q. Wasn't there a time in the industry, Mr. McCune, when to improve your machine running qualities it was necessary to sacrifice a little bit of the moistureproofing or vice versa?

A. No, not of the moistureproofing.

Q. Of the coating?

A. No.

8590 Q. Weren't there certain things that had to be sacrificed to improve the machine running ability of the material?

A. There may have been certain things that were temporarily sacrificed, but it didn't—you can't say that it is necessary to sacrifice one for the other.

Q. It is possible, though, on this test, that because Sylvania's cellophane shows as inferior for certain tests here and superior for other tests, that its inferiority may be contemplated for its superiority in the characteristics it was trying to build up?

A. I wouldn't know.

Q. Is it possible?

A. No, I wouldn't even say whether it is possible or not. I don't know that. I would have to study that report considerably more than I have in order to answer that question.

Q. Do you recall, sir, in the year 1935, a large piece of business that the Dupont Company lost to the Sylvania Company because of the extreme brittleness of Dupont film?

A. No, I don't recall that instance.

Q. Permit me to refresh your recollection, sir, by reading a short paragraph from the annual competitive report of the Dupont Company of 1935. This is Government Exhibit 76, in evidence. "Prior to 1935 we had been successful in securing practically 100 per cent of the available business of the cigarette and
8591 smoking tobacco manufacturers. However, about the middle of the year the R. J. Reynolds Tobacco Company, manufacturers of Camels, began to buy a portion of their requirements from the competitors. Difficulties with our sheeting, particularly brittleness, which developed about this time, was given as an excuse by the company." Do you recall that incident now, sir?

A. I was at Old Hickory at that time. I have a hazy recollection of it, but I was not in direct contact with it.

Q. Old Hickory was handling most of the tobacco accounts at that time, sir?

A. I think not. I think that has always been handled largely at the Richmond plant.

Q. And you probably would not recall another incident, quoting again, "P. Lorillard and Company, following mechanical difficulties, in the latter part of 1934, in the use of cellophane on their Briggs smoking tobacco unit, placed practically the entire 1935 business for this unit with Sylvania, an estimated loss to us of 56,000 pounds." Do you recall that incident, sir?

A. Not offhand, no.

Q. Well, that is one customer, apparently, there, according to this Dupont report, who found the product too brittle?

A. That's right.

Q. And another one who complained about the machine
8592 running qualities. Do you think that those were exceptional cases confined to that one year, Mr. McCune?

A. Oh, I wouldn't say that they were confined to any particular year. We, as I mentioned to the Court yesterday, do have bugs, and I imagine we will continue to have them.

Q. And your bugs will be reflected in the quality of the film, as we see in these instances?

A. Yes.

Q. Would you recall the Puerto Rican American Tobacco Company situation in the following year, which up to that time had been 100 per cent Dupont?

A. No.

Q. You don't recall that that company reported, "The greater machine efficiency, less waste, and tighter seal secured with competitive stock decided the issue"?

A. I don't recall that specific instance, no.

Q. Do you recall in 1936 a place about difficulty encountered because of brittleness, mechanical problems, in the application of cellophane, superior moistureproof qualities of the competitive stock, being reported as reasons for additional loss of business?

A. I can't recall that specific instance, no. I do know that such occurrences happened.

Q. In 1939, from Government Exhibit 80, another competitive report, for that year, "Inroads suffered, losses suffered,
8593 in the cracker and biscuit division of the industry, with Sylvania taking an estimated 60,000 to 70,000 pounds from Keebler-Weyl, as the result of dissatisfaction with our material's mechanical performance"?

A. That was in 1939?

Q. It is listed in the competitive report for the year 1939, sir.

A. All of these instances you bring up are reports that I had no access to at the time.

Q. I understand that, sir. I am trying to see if we can refresh your recollection to remember, would there not, with these instances, be reports down to the production end from above, "Let's correct this thing"?

A. Yes.

Q. Well, wouldn't they come to your attention that way?

A. They probably did. I don't remember the specific instances now.

Q. How about 1942? Is your recollection pretty clear for that year, Mr. McCune?

A. I was at Clinton at that time.

Q. Do you recall a certain situation in which there were large orders for special Government film for war use, and that Dupont was experiencing productive difficulties so that the Government, for this very important war material, had to get their entire
supply from the Sylvania Company, and to compensate
8594 Sylvania Company's loss of civilian business the DuPont Company had to provide the Sylvania Company with film so Sylvania could keep its customers while Sylvania was making war film? Do you recall that?

A. I recall hearing of some such incident. I have no direct knowledge of it. It was at the Clinton plant, at which there was none of that film produced.

Q. But there was such an incident? You have heard about it?

A. I have heard there was, yes.

Q. It would seem, would it not, sir, that in that instance Sylvania quality was not so bad?

A. Yes.

Q. Nor was there engineering skill?

A. That's right.

Q. And that was 1942. And recently, Mr. McCune, I believe that you have had some personal experience with reported superiority of Sylvania film, particularly with regard to the Charms Company?

A. Yes.

Q. Did you find that there was anything wrong with the Sylvania film in that case?

A. No.

Q. The customer thought it was better, didn't he?

A. Yes, he did.

8595 Q. And wasn't there another similar incident? Wasn't the Beechnut Company at Canojoharie at that time?

A. That particular incident is not recalled.

Q. Then, to sum it all up, Mr. McCune, have we found anything in this discussion we have had of relative qualities of the two films that would indicate that Dupont film was so vastly superior as to the reason for this position of seventy per cent of the production in this country?

A. There has certainly been nothing brought out in this questioning that would so indicate, no.

Q. It is rather to the contrary, is it not, sir?

A. This questioning covers only one side of the picture.

Q. That is very true, but there is this side of the picture, is there not?

A. Absolutely.

Mr. MINICUS. Thank you, sir.

Redirect examination by Mr. McGLOTHLIN:

Q. Mr. McCune, when you got the reports in one fashion or another as to developments in Sylvania quality or defects in your quality, what did you do about it?

A. Well, if it were a manufacturing fault, we took steps to improve it. Whatever steps happened to be appropriate for that particular fault. If it were a formulation deficiency, then our research and development people went to work on that.

8596 Q. In the instance of the cigar film that was mentioned, do you have any recollection as to what was done with respect to a specific type for cigars?

Mr. MINICUS. My objection, your Honor. There was no discussion of cigar film. I very carefully avoided that one. I spoke of cigarette film with the R. J. Reynolds Company and the Lorillard Company.

Mr. McGLOTHLIN. Your Honor, the Puerto Rican American Tobacco Company does not make cigarettes. It makes cigars; and the Puerto Rican——

The COURT. Yes, you mentioned that company.

Mr. MINICUS. I have no idea what the Puerto Rican American Tobacco Company makes.

The COURT. Well, let us find out what they make.

Mr. MINICUS. I will concede readily, from the fact of their location geographically, they probably do make cigars.

Mr. MCGLOTHLIN. Is that a stipulation?

Mr. MINICUS. Would you like to have it written, sir?

Mr. MCGLOTHLIN. No; just make it.

The COURT. Proceed.

By Mr. MCGLOTHLIN:

Q. What did Dupont do about cigar film when it found that Sylvania Cigar film was taking business?

A. That problem was given to our research organization.

Q. And what came from it?

8597 A. A cigar film such as we have today.

Q. Did production increase of cigar film after the new type came in?

A. Yes.

Q. Do you have any knowledge, Mr. McCune, of how long this situation occurred wherein Dupont was not making a particular type of film for Government use?

A. I cannot testify on that at all. I was located at the Clinton plant, and what I heard was very sketchy and hearsay.

Q. None of such type was made at Clinton; is that correct?

A. No.

Q. Do you know what the use of the film was, what it was designed for?

A. I understand it was for capes, for use in the armed forces, yes.

By the COURT:

Q. What?

A. Capes. Gas capes.

By Mr. MCGLOTHLIN:

Q. Has Dupont quality changed from time to time over the years?

A. Yes.

Q. Has the change been upward or downward over the years?

A. Upward.

Q. Has Sylvania quality also changed?

8598 A. Yes.

Q. Are there a number of different qualities to a piece of a particular type of cellophane?

A. Innumerable.

Q. In speaking of the superior quality of cellophane film, how were you addressing yourself? Were you addressing yourself to a

multiplicity of facts, overall factors, superiority in each factor, or what?

A. Over a multiplicity of factors, with superiority in most, but not all.

Q. Is roll uniformity an important factor?

A. It is.

Q. Would you say you competed with Sylvania as to quality?

A. Yes.

Q. Do you encompass quality in the idea of competitive position?

A. I don't think of it that way. I think of it in terms of customer satisfaction.

The COURT. We will take our mid-morning recess for ten minutes.

(At this point a brief recess was taken.)

8599 Mr. GESELL. If your Honor please, we are coming to a somewhat different topic. We are turning from production and research to sales, and before calling the next witness there are one or two matters I would like to deal with briefly.

The first of those relates to the request which we made of the Court at page 4424 of the transcript to take judicial notice of three publications which are relied on in the trade: The Packaging Catalogue for 1932 and 1939 and the Modern Packaging Encyclopedia for 1946 and 1947.

Your Honor agreed to take notice of the publications at that point of the record and I agreed in return to supply the Court and Government counsel with a statement of the particular portions of the publication which we were particularly anxious for the Court to notice, and I have the publications here which I would like to leave with the Clerk for your Honor's convenience as we refer to them in briefs and references.

I think it might be well if we put into the transcript at this point a memorandum which I will hand a copy of to the Government—it is about four or five pages long—of the specific articles, advertisements and other matters which we wish your Honor to notice.

I will hand a copy to Mr. Minicus and to the Reporter so that he can spread it on the transcript.

8600 (The memorandum referred to is as follows:)

1932 PACKAGING CATALOG

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Mr. GESELL. The other matter is one raised by a question which your Honor addressed to Mr. Mitchell yesterday. You were seeking in this document which contains physical examples of converter items examples of some of the different types of film which his testimony related to, and just as a matter of interest I can hand up to the Court a group of some of the more important types of films, cellophane films.

This contains P. T., which your Honor is aware is the plain cellophane. I guess its most important use is on paper products; this is 300 M. T. 31, which is the type used for cigarettes; M. S. T. 52, which is the type used on cakes, carton overwraps,
8607 double wall bags, and so forth; M. S. A. T. 86, which is a cheese wrap; M. S. A. T. 80—I think that is the one your Honor had particularly in mind, and that is used for fresh meats. That is the one Dr. Mitchell was discussing. L. S. A. T. is in there which is used for fresh produce and luncheon meats, and there is also a vinylidine chloride coated or Saran type K–202.

The COURT. Does it have any particular use?

Mr. GESELL. It has super-moistureproofness, I think, as the witness said, for such things as dried fruit, your Honor, and that is the one we were also looking for in the exhibit yesterday.

R. R. SMITH, called as a witness on behalf of the defendant, being duly sworn, testified as follows:

Mr. GESELL. Following the practice, your Honor, which we have followed, I would like to have a brief statement about Mr. Smith's testimony.

He is assistant director of sales of the film department, and he has spent practically his entire life selling cellophane, first in the field and then as a supervisor. It seems to us that sales is the next logical step in the development of this testimony. We have covered the origins of the business, the development of moistureproof, the research to improve quality and lower cost and production efficiency, and we now come to sales.

8608 There is a great deal of material on this, your Honor, not only the documents of which you are aware, but I think I should advise the court, without going into the details of the content, that during the recess at least fourteen of the witnesses whose testimony was taken are concerned with various aspects of the sale of Dupont cellophane. That testimony covers more than a thousand pages. Your Honor may be sorry to hear it. It contains the testimony of users, the testimony of converters, and the testimony of manufacturers of other materials.

Mr. Smith's testimony is addressed to what perhaps is the most significant single issue on the Government's pleadings.

The COURT. The testimony to which you have just referred is by way of deposition?

Mr. GESELL. By way of deposition, your Honor, and is being covered by this summary procedure which your Honor has directed.

Certainly one aspect of the anti-trust division's case, and we feel in the last analysis the only thing that is left of it, is its contention that Dupont has a specified percentage of cellophane. The Columbia Steel decision, your Honor, has of course said that the relative effect of percentage command of a market varies with the setting in which that factor is placed. Mr. Smith's testimony will be directed to two issues, accordingly. First of all, his

8609 testimony will develop what should be taken into account in determining the percentage. But of course that is the least important. The more significant matter to which his testimony is addressed is that whatever percentage is taken, the issue remains whether in the market setting Dupont has the monopoly powers claimed in Paragraph 22 of the complaint,—the power to control the supply, the power to exclude others, the power to fix and maintain arbitrary prices, and the power to restrain, as the complaint states, free and open competition at the distribution level of the industry.

His testimony will be concerned with what are the markets? how do they behave? what is the competition in those markets? and what factors determine who gets the business? In short,

whether Deupont has a control or the power to control. He will deal in his testimony with all of the major end uses of cellophane, in concrete terms, on the basis of his own personal experience, and will recite actual events and transactions bearing on these various points. It is my expectation that his direct testimony will take considerably more than a full court day.

Direct examination by Mr. GESELL:

Q. Mr. Smith, will you state for the record what your present position is with the Dupont Company?

A. My present position is assistant director of sales of the film department.

8610 Q. How long have you been concerned with various aspects of the sale of cellophane, Mr. Smith?

A. I have been concerned with the sale of cellophane for nineteen years this December 7th.

Q. That means you started sometime around 1933; is that right?

A. I started on December 7th, 1933, as a salesman.

Q. What in a general way has been the nature of your selling experience prior to that time, Mr. Smith?

A. After leaving New York University, where I attended for three years, I spent about eight years in various merchandising and advertising and marketing activities. One of them was the marketing of a new toothpaste, which is an experience I advise you not to try. I was with the Vick Chemical Company in the selling of their Vick's Vapo-Rub, through the Southern states. I was with a topics publishing company as assistant to the vice-president, where my duties consisted at that point of advising trade paper campaigns for small advertisers who had no agencies of their own. And, inasmuch as you want it all, I have to confess that at one time I sold Fuller brushes.

Q. Door-to-door?

A. Door-to-door.

Q. When you started in 1933, I think you stated you started as a salesman?

A. That is correct, sir.

8611 Q. Where were you stationed?

A. I was stationed in Pittsburgh.

Q. How long were you a salesman in Pittsburgh?

A. I was a salesman in Pittsburgh for approximately three years, I think lacking a month.

Q. What was the area that you called on?

A. I covered Western Pennsylvania, all of Western Pennsylvania from Altoona west, northwestern Ohio, southeastern Ohio, most of West Virginia, and Northwestern Maryland.

Q. What type of customer did you call on?

A. The biggest single customer was the baking industry. I think there were more bakers in that territory than any other single area in the United States. There were over 100. The meat packing industry. There were three very large candy plants in the area, two large cracker and biscuit plants. No frozen food at that time. Some textile business. Popcorn and potato chips. I think that just about covers it.

Q. Were there any converters in this area?

A. No, sir, no converters in that area.

Q. You called only on direct users?

A. I called only on the direct user; that's right, sir.

Q. What was your next major sales activity after being a salesman in the field?

A. I was brought in from the field to take charge of our market research and promotion, in what we called at that time
8612 major industry presentations, or major industry studies.

Q. How long were you in that work?

A. I was in that work, either doing it individually, or initiating it or having responsibility for it, for about four years.

Q. Where were you stationed?

A. I was stationed partly in New York and, when we moved to Wilmington, I moved to Wilmington with the headquarters group.

Q. What kind of work did that entail, Mr. Smith?

A. That was a responsibility which had to do with the development of studies that were aimed at particular industries either where we were making no progress whatsoever or where we felt that we had opportunities for further growth.

Q. What sort of materials and what sort of activity did you engage in in making those studies?

A. It was based on market research primarily. The way the direction of work was arrived at, Mr. Gesell, was something along this line. The sales management group, of which I was not part, and our district managers, in conference, would decide that perhaps a certain industry should be looked into, either to determine why we were not getting anywhere or because they thought maybe we had possibilities of getting somewhere. Well, that job was mine, that was my assignment, and I used to have to go about it in this general way. Now I believe there has been
8613 mention here of trade reports, and I want to make it perfectly clear the trade reports, in my work, was the Bible and the starting point of everything.

Q. What other materials did you use?

A. Well, I would make a study and analysis of trade reports, in order to determine a possible direction or a possible weakness; I would consult with leaders in the industry regarding the particu-

lar problem I was encountering; I would get together all the statistical matters; I would go out and talk to salesmen who had similar accounts. In other words, what I tried to do and had to do in connection with a certain industry was to gather all the conceivable facts, analyze those facts, interpret those facts, and then try to find a direction for market research.

Q. What were some of the promotions in terms of the fields of use involved in your work during this period?

A. Some of the more important ones were in the meat industry, the cracker and biscuit industry, two jobs that we did in the wholesale baking industry, a very important development in the cake field, that we followed, a study of bulk food merchandising, which was directed towards converted products exclusively, and then there were others, of course, where we did nothing, because our facts just would not permit us to do anything.

Q. What was your sales activity after that, Mr. Smith?

8614 A. After that I was sent to Chicago as assistant district manager there, and my primary job was field supervision, although I did have responsibility for several major accounts personally.

Q. How big an area was under the jurisdiction of the Chicago office?

A. To shorten it, you might say generally the entire Middle West, eleven or twelve states.

Q. What were some of the major accounts for which you had direct responsibility at that time?

A. I was personally responsible for sales to Swift and Company, Armour and Company, Wilson and Company, the Cudahy Packing Company, Kraft Foods Company, Brown and Williamson Tobacco Company, E. J. Brock and Sons, who are the world's largest manufacturers of candy, Bunty Brothers, who are a very substantial account in the Middle West, and I had indirect personal responsibility for the Kroger Grocery and Baking Company. I had enough to do.

Q. How many salesmen reported to you?

A. About eleven salesmen, sir.

Q. Were there any converters in that area and, if so, did you have any contact with them?

A. Yes, there were converters in that area, but in so far as my responsibility was concerned I had contact with them only in the development of possible post-war business and working with them in conjunction with the accounts on which I called.

8615 Q. After a time you became district manager at Chicago, did you not?

A. That's right, sir.

Q. How long were you district manager?

A. I was district manager from the 1st of January, 1944 until the middle of—until August, I think it was, of 1945.

Q. About a year?

A. A little over a year.

Q. Now following that what responsibility did you have with respect to cellophane sales?

A. I had been stating to our management in Wilmington that I thought that we should have a little better sales training in order to meet the general competition of materials pre-war, and they evidently took the point of view that if I thought so, I ought to do it, so they brought me in to Wilmington and gave me the job.

Q. What was that job?

A. That job was the development of a sales training, basic selling course for salesmen, which was given over a period of three months time.

Q. How long did you take, Mr. Smith, on that work?

A. I was on that work, actually until 1948, about the middle of 1948.

Q. In speaking of sales training, will you tell us what type of training that entailed? What in a general way was
8616 the basic nature of the course and the matters given particular emphasis?

A. Yes, sir. Well, I would like to preface those statements, Mr. Gesell, by saying something about industrial selling. I think that there is a grave misunderstanding abroad as to what constitutes a creative industrial salesman, and inasmuch as we are going to be talking evidently a great deal about creative industrial selling, I think that there should be some understanding of just what kind of a man we are talking about. There are all kinds of salesmen. There are door-to-door salesmen and commodity salesmen and all kinds of interpretations of salesmen, and there is a tendency, unfortunately, to throw them all into one pot and say a salesman is a certain kind of individual.

8617 Q. What kind of salesmen were those?

A. Those were creative industrial salesmen, and that means that they were not order takers. They could not be order takers, and if they were they would fail.

Q. What were the kind of matters emphasized in the course?

A. One of the principal things that we have to emphasize, and it is the basis of our whole training of men, is that when they go out to sell an industrial proposition that they just can't throw a blanket over the whole packaging industry and expect to succeed. In other words, we tell them you cannot take this product out and dangle it in front of the customer and say it is bright, shiny, and pretty, and it is moistureproof and everybody else uses it, why don't you; we tell them that is the precise way to fail.

Q. How did you tell them to sell?

A. We told them that the only way they can sell is to recognize the fact that they have got to approach everybody's packaging problem as a law unto itself, and the reason we tell them that is because we have learned it through very bitter experience.

Q. How many salesmen does Dupont have selling cellophane?

A. We have all told about 60 men, 60 or 61.

Q. Are any of those men technically trained?

8618 A. Some of them are technically trained, yes, sir.

Q. In what matters do the salesmen require technical training?

A. Well, insofar as our basic training is concerned they have to know the inside and the outside of the 50 or 60 odd film types that we make and what they will do, because there is no such thing as one type of film doing everybody's job. That is one thing they have to learn.

The second thing they have to know technically is the production application of those films. We spend a great deal of time taking these fellows through the plants and showing them how machines run and why they run and what cellophane does on those machines.

There is another thing that they have to know, and that is what kind of competition they are facing; so we teach them the basic elements of the materials against which they are competing—paper, foil, pliofilm, competitive cellophane, Saran, and Cry-O-Vac, ad infinitum. Unless they know that they don't know what they are competing against.

Q. What knowledge do they have to have in the field of packaging as such?

A. Well, that is a good point. They are in the packaging business, we teach them, not in the material business. In other words, we teach them that a man does not package because

8619 he likes to or wants to. He packages because he feels he has to, and if they are going to be in the packaging business they have to know how to develop a package, to develop a complete package. We teach them color and design so that they can develop a complete unit in color and design with the proper type of film and proper type of machine application, know what it will do on the product under a given set of circumstances, and so forth. In other words, they have to be prepared to actually get into somebody else's business and do a job.

Q. Well, after you left this job of developing the sales training course what was your next responsibility, Mr. Smith?

A. My next responsibility was Assistant Director of Sales of the Cellophane Division in charge of all field selling activity.

Q. And you have been in that capacity since?

A. That is correct, sir.

Q. When was the Film Department organized?

A. It was organized in April of 1950.

Q. And prior to that you were in the Rayon Department?

A. Prior to that we were one of the four divisions of the Rayon Department; that is correct.

Q. What flexible packaging materials does the Film Department sell in addition to cellophane?

A. We sell cellulose acetate and polythene.

8620 Q. Roughly, what do you estimate to be Dupont's percentage of acetate and polythene?

A. Our percentage of acetate is less than twenty percent. I will estimate it roughly from the last figures I have seen about eighteen per cent.

Q. What about polythene?

A. Oh, we have, so far as I can determine, between five and eight per cent. of the polythene business.

By the COURT:

Q. What is the predominant use to which both of those types are put?

A. Well, they are competing in the same way that cellophane is, sir, in various applications. Acetate is very active in the produce field particularly. It goes on such things as stationery, and it is a big item in the window box field.

Q. It is heavier, is it not, than cellophane?

A. Not necessarily, sir. It is made in various gauges.

Mr. GESELL. We are going, your Honor, to take up each use and the materials in it and the nature of the competition as we go along.

The COURT. Fine.

Mr. GESELL. I am going to first ask Mr. Smith a few questions of a general character before turning to the particular uses.

8621 By Mr. GESELL:

Q. What do you say, Mr. Smith, is the principal purpose for which plain and moistureproof cellophane is sold?

A. Well, the predominant purpose is for packaging.

Q. What other uses does it have apart from being a packaging material?

A. Well, it has uses for fabricated items, some industrial applications.

Q. What percentage of Dupont's business is for fabricated or industrial items?

A. Well, if you throw the two together I would say roughly about five per cent.

Q. Is cellophane exported for any purpose other than as a packaging material?

A. Not to my knowledge.

Q. Can you tell us what are the general categories of customers to whom Dupont sells cellophane for use as a packaging material?

A. Well, we sell to three general categories for use as a material, and that is the manufacturer, the wholesaler, and the retailer.

Q. Can you explain who would be, for example, a manufacturer?

A. Yes. Well, let us take a package of cigarettes. They would be classified as a manufacturer, the cigarette
8622 manufacturer.

Q. Who does his own wrapping?

A. Who does his own wrapping; that is correct.

Q. Is the manufacturer sometimes called a direct user?

A. Yes, sir, he is a direct user, sometimes.

Q. What would be an example of a wholesaler?

A. Well, a wholesaler would be a wholesale grocer, for example, who is using cellophane bags to package bulk items such as beans, peas, rice, and that sort of thing; or he might be a wholesale produce merchant who was in the wholesale produce business packaging spinach, let us say, or cole slaw, salad mix, or something of that kind. He would be classified——what we would classify as a wholesaler.

Q. Whom would you classify as a retailer?

A. We would classify as a retailer the man who would do his own packaging at store levels such as, let us say, the Jewel Tea Company in Chicago who do a great deal of store packaging of produce and meats.

Q. At the store level?

A. At the store level.

Q. How do converters fall into this category?

A. Well, the converters fall into that category by calling on the same trade that we do.

Q. Do you call on the converters?

A. Yes, sir, we do.

8623 Q. Do your salesmen call on all of these different categories of users that you mentioned?

A. You mean of the end user?

Q. Yes.

A. Yes, they do.

Q. Do converters have salesmen?

A. Yes, they do.

Q. Who do those salesmen call on?

A. They call on the same identical end users.

Q. How many converter salesmen would you say there were in the country, salesmen of converted materials?

A. I want to be conservative about this now, because it is a fantastic figure. It is over four thousand, including the salesmen of their agents and brokers.

Q. And those four thousand men call on the various direct users that you have described?

A. That is correct, sir.

Q. And how many salesmen did you say Dupont had?

A. We have approximately 60 men calling on the direct user.

Q. How many do you have calling on the converters?

A. Six.

Q. To what extent do the Dupont salesmen develop business for converters and jobbers?

8624 A. Well, it is difficult to answer that, Mr. Gesell, in terms of extent. I think the best way to tell you is to define their responsibility, and that is this:

That our salesmen who call on the manufacturer and wholesaler and the retailer who manufacture products that go into consumer packages for sale to the consumer have this basic instruction: That it is their joy to sell cellophane. If the end user wants to use that cellophane in unconverted form, that is the way the package turns out and we supply it direct. If he wants to use, however, a package that has to be printed, it makes no difference to us whatsoever; then that business goes to the converter and he supplies the end user. We don't bill it to him at all.

Mr. Gesell. Your Honor will recognize the relation of that testimony to the impulse wave theory of the Government's which was on the blackboard.

Q. Do you know whether or not Sylvania follows this same general method of distribution?

A. Yes, they do.

Q. What about Olin Industries? Do they follow the same general method?

A. Yes, they do, and if they don't they won't sell.

Q. Do the Dupont salesmen who are selling cellophane sell any other flexible packaging materials?

A. Yes, they sell acetate and they sell polythene.

8625 By the Court:

Q. Dramatize this thing a little for me, Mr. Smith. What happens when a salesman goes up to the Whitman Candy Company in Camden?

A. Well, for what particular purpose, sir?

Q. Well, the cellophane wrapped around their candy boxes.

A. Well, they are using cellophane around their candy boxes and it happens to be a P. T. cellophane. That use is established.

So he makes no effort, naturally, to sell him something else because he is satisfied.

Q. In other words, that is a matter of a continuing order?

A. Practically so; at least for the period until changes occur.

Q. But the first time he called on Whitman what would he do, discuss Whitman's problem?

A. That is right; that is right. He can't go in and discuss anything until he actually knows what that customer's problem is, and that problem is never the same, sir, with two different accounts.

Mr. GESELL. If I may again, your Honor, in taking up these uses, which I am within a couple of pages of my notes of getting to, we are going to describe the actual method of selling, the
8626 development of business in each of these particular types of uses, and the factors the salesman works with, how he overcame competitive obstacles and what the obstacles were.

The COURT. I promise you I will be patient.

Mr. GESELL. I appreciate your Honor's questions and I am not going to stop that, but I am explaining why I am not developing it further at this moment with the witness.

By Mr. GESELL:

Q. Now, directing our testimony to cellophane, does Dupont at the present time have any discounts which it allows to direct users?

A. None whatsoever.

Q. What is the discount granted to converters?

A. Our converter discount is 7 per cent.

Q. What is the discount granted to jobbers, if any?

A. There is no discount granted to jobbers. The jobber buys at list price.

Q. Does Dupont have any contractual arrangements with direct users under which they undertake to buy their entire requirements from Dupont?

A. We do not.

Q. Does Dupont have any exclusive or other contractual arrangements with converters or jobbers?

A. No, sir.

Q. Do you know of any agreements or understandings
8627 written or oral, which limit Dupont's right to export cellophane?

A. None whatsoever.

Q. Now, what is the principal use for cellophane as a packaging material?

A. The principal use is in the food business, Mr. Gesell.

Q. What percentage of your cellophane business goes for food uses?

A. I think it is between 75 and 80 per cent; let us say approximately 78 per cent, somewhere in there. It varies month to month.

Q. Can you give us an itemization of the principal foods which are packaged with cellophane as you classify them in your business?

A. Yes. The principal foods are baked goods, meat, candy, crackers and biscuits, frozen foods, fresh produce, and snacks, which includes a wide miscellaneous group of products like popcorn, potato chips, and peanut butter sandwiches and the wide range of products that fall in that general category.

Q. Of this 78 per cent. more or less of your business which goes to food, how much of that 78 per cent. do those particular uses that you have just described constitute?

A. Over 80 per cent.

8628 Q. Now, in those food markets for what particular purpose do the customers purchase cellophane?

A. Why, the primary purpose for which they buy, Mr. Gesell, is to develop a package that goes through the channels of distribution, depending upon its starting point, eventually is sold over the retail counter to the consumer who comes to buy it in the retail store.

Q. To what extent is your business in this food field for consumer units for retail sale?

A. I don't quite understand that question.

Q. Would you sell for any other purpose other than to food users who use the material to package units for retail sale?

A. Oh, yes, there are other industries in the non-food packaging groups.

Q. I am talking about the food field?

A. I am afraid I don't understand that.

Q. As I understand your testimony, it is that you sell your material to people who package for sale in consumer units through the retail stores?

A. That is correct, sir.

Q. What percentage of that total business in the food field is for that purpose?

A. I would say practically 100 per cent.

8629 Q. Is there a difference between the use of cellophane as a packaging material in this regard in other fields, in other than the food field?

A. No, sir.

Q. It also is in consumer units for retail sales?

A. That is correct.

Mr. GESELL. I am just at the point where I am taking up baked goods, your Honor, and it is a long story.

The COURT. Yes, I am going to recess. Recess to 2 o'clock, p. m.

(At this point a recess was taken until 2 o'clock, p. m., the same day.)

8630 TWO O'CLOCK P. M., THE SAME DAY.

Present: As before noted.

R. R. SMITH (resumed).

Direct examination (cont.) by Mr. GESELL:

Q. Just one question, Mr. Smith, before we turn to specific end uses. You mentioned these 400 converter salesmen. Do they sell only cellophane or do they sell other products as well?

A. They sell a great many other products as well, Mr. Gesell.

Q. What are some of those products?

A. Many of them are converted glassine, some of wax paper, some of pliofilm, some of foil, some of saran, some of them sell Cry-O-Vac. I think that just about takes care of the major items that they sell. But many of them handle those items in addition to cellophane.

Q. Now turning to the specific end uses,—what is the principal end use to which Dupont cellophane is sold?

A. I would say it was the bakery trade.

Q. What are the various products wrapped with cellophane comprised within the bakery trade, and how would break the bakery trade down into categories?

8631 A. For practical purposes, I think that we could put it in the category of white bread and variety breads and sweet goods, in which we would also classify cake. We take cake and sweet goods as one classification. And then there was a miscellaneous group of products which you might say are pies and doughnuts and that sort of thing.

Q. Among these categories, which of them rank in importance in terms of the volume of the product baked?

A. White bread is by far the largest.

Q. To what extent has Dupont sought over the years to sell cellophane to these various branches of the bakery trade?

A. As long as I have been associated with the sale of cellophane, Mr. Gessell, we have sold to all branches of that trade as intelligently and vigorously as we possibly could.

Q. To what extent are you personally by your experience familiar with the packaging of baked goods?

A. As I said to you before, I believe, I called on well over 100 bakeries for just about three years while I was on the territory.

Q. That is while you were in Pittsburgh?

A. That is correct. Then while I was handling these special industry promotions I made a very intensive study of the entire

house to-house bakery industry, also of the wholesale bakery industry on cakes. I have written two training moving pictures which are still in use for the training of bakery
8632 salesmen, both wholesale and house to house. I am familiar with the major bakery operations in the Middle West. I was personally responsible for sales to the Purity Bakery Service Corporation, in Chicago, which is one of the biggest bakeries in the United States, and I have had a great deal of personal contact with the Campbell Taggart Bakeries and the Interstate Bakeries, the former in Dallas, Texas, about a chain of forty plants, and the Interstate group in Kansas City with another large chain of plants. I forget now exactly how many.

Q. What percentage of Dupont's cellophane sales does its business to these various segments of the bakery trade represent?

A. We estimate it to be in the neighborhood of twenty to twenty-five per cent. I would say nearer twenty per cent.

Q. Now turning to white bread first, what are the other flexible packaging materials used for the wrapping of white bread?

A. There have been a number, but for practical purposes I think that you could say that there are really only two main materials, and that is wax paper and wax glassine. They by far represent the largest use in the bakery industry.

Q. Is cellophane sold for white bread?

A. Yes, sir.

Q. When Dupont first sold cellophane for white bread, can you tell us what some of the principal obstacles encountered from buyers and potential buyers were in the market?

8633 A. Yes, I think so. When I first was assigned to the territory in Pittsburgh, in 1934, as I recall it, I was told that the principal competition was going to be from cheaper papers. I frankly didn't believe it, but I found that out very quickly. The principal obstacle was cost. Cellophane at that time, depending on whether it was printed or unprinted, cost from three to five times the cost of wax paper, and if I heard once I heard over a hundred times a statement such as this, "Do you expect me, Mr. Smith, to pay from three to five times what I am paying for my present wrapper, when the profit on what I am making is not as much as the difference that you are asking me to pay?"

Q. Whom did you hear that from?

A. I heard that from baker after baker after baker.

Q. How did the price of cellophane compare with glassine at the time?

A. Depending on how it was used, it was from two and a half to four times the cost.

8634 Q. Now, in addition to this cost obstacle were there any other obstacles encountered in attempting to sell for white bread?

A. Oh, yes, the very big obstacle was the fact that there was almost no equipment to handle cellophane, and most bakeries that were equipped to handle wax paper were faced with this kind of a problem: That if we could induce them to even give our material a trial the problem that we had was How are we going to handle it in production? Can we wrap it with hand labor? Of course, the obvious answer was no. Then we had to try to convert a machine, and if we could not convert a machine then we had to ask that baker, even to try our product, to invest from $1,500 to $3,000 in a brand new piece of equipment, and most of them, frankly, just would not do it until they saw a more compelling reason than we could offer them.

Q. What other factors were there besides cost and availability of wrapping machinery?

A. Well, one of the big factors in the white bread field is the fact that not only is wax paper in the minds of the baker a good wrapping material, but what they really wanted was a package that was completely distinctive and different from anybody else's, and one of the objections that they had to cellophane when we talked about visibility, which we talked about very fre-

8635 quently, was "If I do this I am looking exactly like my competitor, and I don't want to. I want my wrapper to be completely distinctive. I want it to be different."

Q. How could a wrapper of glassine or wax paper be made distinctive?

A. Because it could be printed. It could be printed all over; it could be printed solid; it could have a billboard effect, which the baker wanted.

I can remember the Stocklein Bakery telling me that what they wanted in a wax paper wrapper was something that Mrs. Jones could send little Jimmy down to the store and say, "Get that wrapper with the big orange circle on it." For that reason they objected very much to the use of cellophane, for that among other reasons.

Q. Were there any quality disadvantages that you encountered in the sale of cellophane?

A. I don't quite understand that question.

Q. Any disadvantages to cellophane because of its quality as compared with those other wrapping materials?

A. Yes. We had, of course, the problem of durability in those days. Our material at that time was not nearly so durable as it is today, and it was not at all infrequent on a very cold winter

day to have a tremendous amount of breakage. There was also the problem of sticking, which from the standpoint of machine operation or even hand wrapping was a very serious deterrant.

8636 Q. How did the moisture protection of cellophane compare with wax paper and glassine?

A. Well, we thought it was better, of course, because we were selling our product and we still think so. But the baker was able to satisfy himself that in wax paper he had a perfectly adequate protection for the 48-hour turnover that his bread required, and that is all it was.

Q. Can you give us an example or two from your experience where you actually encountered these factors in competition with wax paper and glassine, factors of cost or production methods, durability or quality?

Mr. MINICUS. My objection is to the use of the word "competition" in there. It calls for a legal conclusion upon the witness' part, and that is one of the issues at stake here, Are these things in competition? I think at least we should have some understanding of what the witness means by the term "competition" when he uses it.

The COURT. Don't use the word "competition." Say "used for similar purposes."

Mr. GESELL. Your Honor, I would like to use the word competition. We can't deal here in fictions.

By Mr. GESELL:

Q. Have you ever heard of the word "competition", Mr. Smith?

A. I most certainly have.

8637 Q. Do you believe that cellophane competes with other flexible packaging materials?

Mr. MINICUS. Objection.

Mr. GESELL. Let me develop this, please.

Mr. MINICUS. I object to the use of the word "compete" until we know what the witness means by the term "compete."

The COURT. I am going to allow these questions, and if it appears unsatisfactory after a half-dozen of them you can move to strike.

Mr. MINICUS. Yes, sir.

By Mr. GESELL:

Q. Do you believe, Mr. Smith, that cellophane competes with other flexible packaging materials?

A. Within the scope of my definition of "competition" it most certainly does.

Q. And what do you mean by competition?

A. By competition I mean this: That where I try to sell my product and I am prevented from selling it my the activity of another material, I consider that material a competitor of mine.

Q. In that sense when you were selling cellophane in competition with wax paper and glassine to the white bread trade can you give us some examples of the kind of competition you encountered?

8638 A. Yes, sir, I can.

Q. Will you do so?

A. Yes, sir. It was my job when I was sent to Pittsburgh to sell cellophane wherever I could sell it for those uses which we considered it to be perfectly logical and natural and where it would do a good job.

Now, when I approached the bakers in that territory, over a hundred of them—and I think if you ask I can name a good many—it was almost universal when I went up to them before I learned really how to approach the problem of selling bakeries and talked about substituting my material for their material, they gave me good reasons why, and I have recited some of them, why it was impossible for them to pay for this expensive material when they were getting what they considered to be a perfectly satisfactory package for the market with one of considerable less cost.

Q. Apart from that general problem of cost competition can you give us some specific examples where you met competition because of poor running qualities of cellophane on the packaging machines?

A. Well, yes. We were able, of course, eventually to sell cellophane in that Pittsburgh market, but in many, many a trial, for example—and I am thinking now—well, let us take the Hankey Bakery Company over in McKees Rocks, Pennsylvania.

8639 When we tried to run cellophane on that machine it was just an absolute impossibility, because the machine was built for wax, and that meant that the machine had preheaters on it to soften the wax, and then it had heaters to form the wax to the folds of the bread, and that it had a cooling device necessarily after the folding device.

Now, it was necessary in the case of wax paper, for example, that it adhere very closely to those heating plates in order for the generation of the heat to melt the wax and make the seal. But when that happened to cellophane it just stuck. The wrapper stuck to the plates and the bread traveled on through and we got a cripple. The only way I could overcome that even in trial, and I am speaking now, Mr. Gesell, as an average man, as an average salesman—we all had the same problem—we used to have to carry piano wire around in our pocket, and that piano wire had to be wrapped around those heater plates in order to even assure us that

there would not be an absolute sticking of the heat sealing cellophane to those heater plates; and then in addition to that we had to corrugate the sheet, so-called. On some of these wrapping machines, particularly the Hayssen wrapping machine, it was what was called a push feed, and the cellophane had to travel almost in a free line, oh, for two-and-a-half feet. Now, wax paper because of its rigidity and glassine the same way, but particularly wax paper because of its rigidity could be shot up there on
8640 that roller and it would feed into the elevators perfectly and rise up and wrap the bread. But we had to string piano wire from one end of the push feed up to the machine in alternating heights so that the cellophane would corrugate in a wave through them and be stiff enough to travel. That is the kind of machine operation—machine difficulties that we met in place after place after place.

Q. Well now, you mentioned the condition of printing and the fact that you could get billboard advertising on wax paper. Couldn't cellophane be printed into distinctive wraps in those days?

A. Oh, yes, it could be printed in distinctive wraps, but as soon as we printed it we increased the cost, at that time, to just about double what the cost of unconverted cellophane was, and thereby we increased the cost hazard, so to speak.

Mr. MINICUS. If your Honor please, Mr. Gesell's question ended with the words "in those days." I object to it as indefinite.

The COURT. Will you fix the time?

Mr. GESELL. Your Honor, this is all about when he started to sell in Pittsburgh. We have been doing it. I thought that was clear.

The COURT. Well, what year was it?

By Mr. GESELL:

Q. What period are you talking about?

A. I am speaking about the year of 1934, February for-
8641 ward.

Q. Can you give us an example too of quality difficulties which you encountered in competing with wax paper and glassine for the white bread trade?

A. Yes, I can. Now you understand, Mr. Gesell, that this was necessarily after we had been able to sell a baker. I can recall that we eventually sold the United Baking Company, over on West Carson Street, in Pittsburgh, and in the winter of 1935, over a period of around four or five days there they had bread returned in droves because they took it out of the hot bakery into about 10 degrees below zero, and the stuff was just breaking all over the place. It took me quite a while to get that business back.

Q. In attempting to sell cellophane at that time in competition with wax paper and glassine, did you seek to emphasize the visibility or transparency of cellophane?

A. Naturally, Mr. Gesell. That was one of the features of our product, and wherever we could intelligently do it, we did it.

Q. What experience did you have in attempting to sell on the basis of transparency alone?

A. I had one that I won't forget. I ran into glassine—there was not a great deal of glassine used in the white bread industry, but there was some,—and I recall making an experiment—the reason I have it recalled to my mind is because I am think-
8642 ing of an experiment that I saw made in this court. It took me back. I think it was Mr. Minicus that made it. And I did the same thing, and it was a good experiment. We were talking about the transparency of cellophane, and I did this three times, and I remember holding up to the light the sheet of cellophane and saying, "You can see through this; it is transparent; and that is going to show your product." And then I held up the glassine and I said, "This, obviously, you can't see through it." Well, it worked the first time, but I did it twice more and I never did it again, because, in the vernacular I had my ears pinned back. I can remember old man Mootz, down in Huntington, West Virginia, who took the glassine out of my hand and he said, "Young man, we do not use glassine on our products holding it up to the light; we put it around our product this way. Now on this raisin bread you can see the raisins, you can see the icing, you can count the slices. That is transparent enough for me, and it is one-third the cost of what you want for your material." I never did it again. I decided I better sell on facts after that.

Q. You have talked about these various obstacles. To what extent do they exist today?

A. They exist today, Mr. Gesell. Obviously not to the same degree as it did in those early days. There has been a narrowing of the cost gap between cellophane and glassine and wax paper. But they exist also to some degree and in greater
8643 respect. For example, the wax paper people have greatly improved their material, the printability of the material. Today a baker, for example, can get process printing on wax paper. That was unheard of in 1934. He can buy a translucent, what is called translucent, but it is so nearly transparent that at five feet away you can hardly tell the difference,—sheet of heavily calendared sulphite, that is sold by one of the glassine companies,—I think they call it super-calendared sulphite— for less than cellophane; and although it approaches the cost, it is still less.

The problem of machines has largely been solved, I am glad to say, although it requires today more equipment to handle cellophane than it did previously, because they used to switch it back and forth, and now they may have to add an extra machine, if they have broadened their line at all.

So that we have the same cost problem, to a lesser degree. We had different kinds of problems, in that we have really a much better wax wrap, and the machine problem is present, but not to the same extent. But the primary problem is still cost.

Q. Now in view of these obstacles that you have described and the competitive conditions, what was the sales strategy that Dupont used in an effort to overcome the obstacles and sell cellophane in competition with these other materials?

A. I had this experience that I have been telling you
8644 about, as we all did, of someone asking this question, "How am I going to pay the difference between this and this and still get it back?" for which frankly there was no answer on the face of it. And after we took that for a while and realized that we were up against pretty stiff competition,—and I still think it was competition,—we only had one choice in the matter; we either had to find how to defeat that cost or take our hats and go home. And the only way we could do that was this. We had to go back to a complete study of every baker's business.

Now I mentioned this morning, Mr. Gesell, that we tried to train our salesmen, and must train them, to recognize that they just can't go out and sell a product by asking somebody to buy this product. They have got to handle each packaging problem separate. And that is why I said that, because I want to point this out. We had to study the bakers' cost of production. How much does it cost them to produce this loaf of broad? We had to study his distribution. How far does he go from his bakery, and how much is it costing him to get out there and back? What is his stale return? What kind of display does he get in the stores? If it is good, why is it good? If it is bad, why is it bad?

We had in some cases to ride his trucks with his salesmen, to find out how they handled this product. If there was anything in the handling that was a costly factor. We had to know what kind of advertising he had, how much he spent on
8645 that advertising, as a per cent of gross sales.

And when we got all these things together, we had to analyze where there was a possible direction to begin to recover that cost, because if it could not be recovered, there was no possibility of sale.

Q. What do you mean, to recover that cost?

A. Well, let me put it this way.

Q. Perhaps you could give us a specific example of what was done in the case of a particular account.

A. Yes, I think so. I am thinking now of the Gartman Baking Company, in Latrobe, Pennsylvania. They had what was considered to be a pretty good cost of production and good display material in the stores and spent very little money for advertising, and they had resisted cellophane on cost. Now I used to follow their trucks back to the bakery, and I would look inside of those trucks and I would find that the stale bread that was going back was open on the ends. But I made a study of the stores in which they operated, and I found out that they were not getting the proper seal from wax. They got a good seal when it left the bakery, but the woman went in the store and squeezed this loaf of bread in order to find out whether or not it was fresh, which is the common practice, and in that handling the ends came open.

So I found out from the retailers that the bread was not selling.

8646 A woman didn't want to buy a loaf of bread with the end open; she wanted to buy it when it was completely sealed. So I would buy and did buy, oh, a couple of dozen of those loaves that were open, and I took them in to Mr. Gartman, and I said, "Mr. Gartman, each one of these loaves of bread that comes back stale because obviously your machine is not properly functioning is costing you just about eight cents,"—because the stale return at that time was practically one cent a pound; they had to sell it for hog feed. Now I said, "I can overcome this problem. Is your stale high?" And it was high. "I can overcome this problem by a better seal than this, so that it won't come out in the store." And, to make a long story short, that was the basis on which I was able to sell the Gartman Baking Company. Only that basis. I didn't talk to him about sales; I talked to him about the problem that was so obvious that he didn't know about it.

Q. When you say you made studies of these distribution methods for the purpose of finding other ways that the baker could reduce his cost so that you could put cellophane on the material, how were those studies made?

A. They were made in this way, Mr. Gesell. The efficiency of wax paper, for example, was, in our opinion, a moot question. And by that I mean the degree to which it performed on a wrapping machine free from rewraps and that sort of thing. Now we would go, with the baker's permission, into his bakery, at nights,

8647 and we would run efficiency tests on that wax paper. If he was only getting ninety per cent efficiency on it, there was obviously room for a better efficiency with our material if we could provide it. That gave us something to work on.

Now there is another method that we used, and I am thinking of this particularly with the Greiner Baking Company, over in

Indiana, Pennsylvania. He didn't want any more sales. He had perfectly satisfactory sales, but he said his profits were not very good. So he gave us permission to study his operation from the standpoint of distribution. How far was he going from that bakery? Now I found out that he was going as far as sixty-five miles away from the bakery, in order to get his volume, and if he traveled fifteen miles in order to sell around four dollars worth of bread, which they sometimes did, his return on that additional volume was absolutely nothing, and it was costing him about nine cents a mile.

So that was a completely unprofitable operation. So my approach to Greiner was that, let's try with improved packaging to sell that volume not sixty-five miles from the bakery but fifty miles from the bakery; and if he could do that, then he would outbalance the cost of cellophane by a reduction in his trucking costs, which obviously were killing his profits.

Q. What has been the margin of profit on white bread to the baker?

A. The margin of profit on white bread at that time was in the neighborhood of about five per cent net. At that time.

8648 Q. On a loaf of bread.

A. On a loaf of bread.

Q. Once you had succeeded, by one of these approaches, in persuading a particular customer that he should use cellophane, did he continue to use cellophane?

A. Not necessarily, and not in many instances.

Q. Can you give us some illustration of what occurred, for example, in this area while you were selling in and around Pittsburgh?

A. Yes, I think so. It happened often enough. Let us take the Liberty Baking Company, in East Liberty, Pennsylvania. We were able to induce them to use cellophane, and we converted their machines with new hot plates at what we thought was reasonable cost, and they started to wrap. But in about four months time, as I remember it, they were ready to quit, and they did quit, because they said it was completely unprofitable.

Now here is why it was unprofitable. They went out and they got, as I remember it,—and I may be a few per cent off now,—it is so long ago—but I think they got around a fifteen per cent increase of sales, which is a very, very good percentage in white bread,—but they got a little greedy, I guess, because they said, well, if they got fifteen per cent, let's try to produce more, and we will put it in the stores and maybe we will get twenty per cent.

Well, that fifteen per cent was all that market would 8649 absorb, and when they put more bread in the store it didn't

sell, and while they retained their fifteen percent the rest of it came back to the bakery stale.

Now when a loaf of bread goes out bearing a half to three-quarters of a cent extra cost and it comes back stale bearing that same extra cost, there is a greater loss in a stale loaf of bread in cellophane than there is in wax paper. So they added up the score after the end of three or four months and they said, "There is no percentage in this; we are going to quit," and they quit.

Q. What material did they go to?

A. They went back to wax. And I have every reason to think that the wax paper man, if he was on his toes, said, "I told you so." I guess he did.

Q. By and large, would you say that once you succeeded in selling for white bread it was customary for the baker to continue his purchases?

A. Certainly it was not in that territory.

Q. What was your experience in that territory?

A. In that territory, Mr. Gesell, I entered there in February 1934, and when I left it in December, late December, of 1936, most of the ten cent loaves of white bread in that area were wrapped in cellophane.

Q. What is the condition today?

A. The condition today is this, that we secured both from
8650 unconverted and converted film, that is, printed and unprinted film, in that Pittsburgh trading area, about a million pounds of business for that one item in 1936, and today, in the City of Pittsburgh, there is not one single pound used on that bread. Not a pound.

Q. Can you tell us what have been some of the factors which have caused white bread customers to shift to other materials after they started using cellophane? What have been some of the factors?

A. One of the factors has been what I have just described, a lack of control over distribution, whereby stale return is not controlled and the item becomes unprofitable.

Q. You gave us an example of that. Are there any other factors?

A. Yes. One thing you must keep in mind, sir, about the baking industry is this, that it is an unusual industry, in that the product must be baked, sold, and turned over within 48 hours, so that with many bakers operating in a given area the impact of anything that hits that market is almost immediately felt, much more quickly than in any other industry I know of. So that, for example, if a baker comes out with a new promotion in white bread and puts a lot of activity behind it, as they did overnight down in Cumberland, Maryland,—one of the bakers brought out a milk

loaf with a big advertising campaign, if it is a good loaf
8651 of bread and if the public will buy it, it affects all other loaves of bread on the market. So that when volume drops in other breads,—and volume is directly related to profit,—it becomes unprofitable to wrap expensively; so they quit: And I can recall that Ort Brothers Bakery, down in Cumberland, Maryland, did exactly that.

Q. What do you mean, they quit? You mean they quit selling bread?

A. No, they didn't quit selling bread, but they quit wrapping it in cellophane, because they said that the volume that they were getting could no longer support the cost. You must recognize this, Mr. Gesell, that one of the production factors in the baking industry is pounds of dough per man per hour. Now that means that if a man has a crew, we will say, a baker has a crew of enough to operate two batches or a batch and a half of dough, and he drops down quarter of a batch or a half a batch, it costs him just as much to produce the one batch as it does the two, so his volume drops but production costs go up; and you have an interrelationship of facts that are related to volume.

8652 Q. In other words, as the price of bread declined or the cost of the raw materials went up cellophane had a greater difficulty?

A. That is right. Now, of course, raw materials were a very big factor in the early troubles we had and they still are. When the price of flour went up or the price of shortening went up the baker either had to absorb it or increase the price of bread, and he just did not increase the price of bread. It was the last thing he wanted to do. And I can recall in 1936, in the early part of the year, almost every baker in northwestern Pennsylvania went out of bread in cellophane because the price of flour went up fifty to sixty cents a barrel.

Q. What did they use instead?

A. They went back to wax paper.

Q. Now, can you tell us any other factors which have operated in this white bread market?

A. Yes. There are a great many ways of influencing the consumer to buy, and not the least of them is either a reduction in price or a considerable increase in the weight, the length of the loaf of bread. Now, if someone is selling in the market a loaf of bread for eight cents wholesale in cellophane and giving sixteen ounces, and a baker decides that he is going to try to capture that market by baking in not a ten-inch pan which was produc-
8653 ing a sixteen-ounce loaf, but in a fourteen-inch pan, and gain that market by giving away some more dough and extra slices, if he is successful in inducing the consumer to buy

that loaf of bread then somebody else is affected, and that has happened a great many times.

Q. What do you mean somebody else is affected?

A. Well, obviously if that loaf sells, Mr. Gesell, other loaves do not sell, and that affects the loaf wrapped in cellophane and volume goes down, and that is a factor. Now, that has happened in many markets throughout the United States.

Even up to date I was just talking the other day to our New England manager as to what had happened to the Maine Baking Company, which was a white bread producer in the state of Maine, up in Augusta, Maine. They used to be in cellophane up to about two years ago. The shortage had nothing to do with it. They are out of cellophane now because something happened in the market. I don't know exactly what it was. That reduced their volume and when their volume reached below the break-even point they had to either take it out of cellophane or quit producing loaves of bread.

Q. And what did they go to?

A. They went back to wax paper and they are still there. I hope we can get them back, but they are still there.

Q. Now, you have told us generally what happened in
8654. the Pittsburgh area, that you got it up to one million pounds in 1936 and you don't have any of it today. Can you give us some specific examples from your experience by particular accounts where shifts of business have occurred on white bread between other materials because of these or other factors that have operated, cases where you have been able to take business away from wax paper or where wax paper and glassine have been able to take business away from you?

A. Yes. I can name for you very easily the bakers that I covered in that area, in the entire Pittsburgh market. There is a fairly long list of them, as a matter of fact.

Q. Well, can you give us some recent examples?

A. Yes. The one that just comes to my mind, because I have seen it quite recently in a report, is the Calderwood Baking Company up in Maine, in a different geographical market than this other baker. They went out of cellophane because of cost.

Just before the war the Minneapolis-St. Paul market in which there was a considerable quantity of white bread went completely out because of one of these factors. I don't know exactly what particular factor, but something had an impact on the market that reduced the value of cellophane in the eyes of those bakers who were using it up there. There was white bread there. I think the Purity Baking Service Corporation had some, yes, I know they did.

8655 Q. You mean there was white bread there and you mean wrapped in cellophane?

A. Yes. Regan Brothers, I believe, had some white bread there. I think the Continental Baking had some there and Zinnsmaster. That happened in that particular area. We are beginning to get some back there now, but we are not back where we were by any manner of means.

Q. What did they go to from cellophane?

A. They went to wax paper.

Q. Are there any large bakers of bread who don't use cellophane?

A. Yes.

Q. Can you give us some examples of that?

A. Yes. The Campbell and Taggert Bakery do not use a single pound, and to the best of my knowledge never have.

By the COURT:

Q. How about the two bakeries in Wilmington, Freihofer's and Huber's?

A. I don't believe they use cellophane on white bread at all, your Honor.

The Columbia Baking Company of Atlanta, Georgia, which is a big chain operator, they use no cellophane presently on white bread, although they did at one time, slightly. I don't believe that Continental now does.

8656 By Mr. GESELL:

Q. I think that is enough.

Have these shifts that you are talking about for the various factors you have enumerated been taking place continually over the period from the time you started out in Pittsburgh up to the present time?

A. Yes, sir.

Q. How much cellophane does Dupont sell for white bread?

A. Well, we sell a very small percentage of the total white bread that is produced, Mr. Gesell.

Q. How much cellophane is sold?

A. Well, we are selling now approximately eight to nine million pounds a year.

Q. For white bread?

A. That is right, sir.

Q. Are you able to tell us what the trend has been over the years in the volume of your sales for white bread? Volumewise, I am talking about now.

A. Yes, I think so, in a general way. We had more white bread business in 1936 than we have at the present time, and it has fluctuated year by year up and down. Some areas at one year

would be larger than others, and while it is small, it is still what we consider to be a very sizeable piece of business; because,
8657 for example, it is about fifty per cent. of everything we sell to the meat industry, although it is only about three t four per cent., maybe a little more, of the white bread produced in this country.

Q. Are you able to estimate the percentage of the loaves of white bread that are wrapped in cellophane compared with the proportions of the units wrapped in other flexible packaging materials?

A. Yes.

Q. What are the sources of your information in making that sort of comparison?

A. I believe that I just said that we estimated somewhere about four to six per cent., I believe I said, of the white bread that is produced.

Q. Is wrapped in cellophane?

A. That is right, and inasmuch as practically 98 per cent. of all the white bread that is produced is wrapped, we estimate roughly that between 94 and 96 per cent. of the white bread that is produced is wrapped in other materials, because it is practically all wrapped.

Q. Where do you get information on the amount of white bread made on which you are able to make this percentage estimate of the amount that is wrapped in cellophane?

A. That comes, Mr. Gesell, from a number of sources. The principal source is the field. Our salesmen in calling on the bakery trade estimate the production of each baker on
8658 whom they call, the production of these various categories of the industry of which I have spoken to you before. We get that information and we check it against the United States Census figures, whatever information may be issued by the Department of Commerce, against bakery trade association figures, and to the extent that we estimate that which is unwrapped we check the field forecast or rather the field potential as the salesmen set it down and arrive at what we feel to be as a result of these combined efforts to secure data a production figure for the industry. Now, we know what we sell them, and because we know what we sell them and because, as I say, about 90 per cent. of everything that is produced is wrapped, I can reach a very logical conclusion that what is not wrapped in Dupont material is wrapped in some other competitive material, and I still use the word "competitive."

Q. Now I want to turn to specialty breads, or I think you called them variety breads. What kind of breads are those?

A. Well, there is a lot of loose terminology in the industry, sir, about variety breads, but I think that the best definition might be that they are dark breads, rye, cracked wheat, whole wheat—bread that is made usually with some percentage of dark flour as opposed to a bread made completely of white flour.

Q. What are the flexible packaging materials that are used to wrap specialty or variety breads?

8659 A. We have exactly the same materials. Insofar as the use of materials is concerned, there is no difference, Mr. Gesell.

Q. Wax paper, glassine, and cellophane?

A. That is right. In principle there has been some foil used on some specialty breads, I think on this Hollywood Health loaf for a while in certain markets, and I use that term in a geographical area. I think some bakers used to foil wrap on that loaf of bread, although they got 25 or 35 cents for it, so they could afford it.

Q. To what extent were the obstacles encountered and sales strategy used for promoting the sale of cellophane on specialty bread comparable to the obstacles encountered and sales strategy used in the case of white bread?

A. They were practically the same thing.

Q. Did Dupont do anything to promote the use of cellophane on specialty breads, and if so what?

A. Yes, we did.

The COURT. Let us take a ten-minute recess.

(At this point a brief recess was taken.)

By Mr. GESELL:

Q. Just as we recessed, Mr. Smith, I think I asked you what if anything Dupont had done to promote the use of cello-

8660 phane on specialty breads in competition with these other materials?

A. Well, we feel, Mr. Gesell, that the specialty bread end of the bakery business was something that we actually had to create. There wasn't any such thing as special breads in this country prior to 1934 baked by the wholesale baker. They just didn't bake them.

Q. What did you do to encourage the baking of these breads?

A. Well, we recognized because of the extreme cost consciousness of the wholesale baker regarding cellophane that we were going to have to create new profit opportunities for him if we were going to expect to make any progress at all. That was not particularly a question of competing against wax paper, because there wasn't any product to wrap.

So our approach to the wholesale baker on variety breads was just this: That variety breads could be made cheaper because of

the ingredients at that time and because there was no particular standardization of price on them, whereas a loaf of white bread might sell in a geographical market for 10 cents flat, that necessarily need not be true of rye bread or raisin bread or cracked wheat bread or what have you, and we pointed out to him that through improvements, through the medium of better packaging—

and of course we were trying to sell cellophane—that here
8661 was a market opportunity for him to price his product at a fair profit to himself and get distribution through improved packaging. Now, I said that we had to create that business.

I think your Honor mentioned the Hubar Baking Company here. I think you would find, sir, if you would check them, their production of rye bread in 1933 or 1934, I think that they made about fifty loaves of rye bread a day. That is my recollection from what I have heard of that situation.

But in my territory in the whole area I covered there were no more than five out of those one hundred bakers that were baking variety breads. So I had to go to them in order to get any business on variety breads and say, "Why don't you put out a raisin loaf? Put that raisin loaf in cellophane and you have something new to talk about going around to these stores. Price it at 12 cents instead of 10 cents or whatever price you think is fair and let us see what happens."

Well, to make a long story short, the promotion was extremely successful.

Q. Were those same promotional efforts used by Dupont throughout the country?

A. Yes, sir, it was a national promotion, and they were extremely successful; and what happened to us was that after we had created that market for ourselves, we thought, we immediately started to share it with the wax paper and glassine people.

8662 Q. What do you mean, you started to share it?

A. I mean this, Mr. Gesell, that I can think of, down in West Virginia, the Greiner—this hapened in lots of cases—the Greiner Baking Company, of Huntington, West Virginia,—we discussed this whole problem; they agreed it would be a good idea to put out three varieties of bread, and they put out rye, cracked wheat, and raisin bread; but they put out all three of them in succession; their idea was that we think we can market this, but we think we can market them in cheaper materials. So I think it rather logical to say that after we had set out to create this market that we did share it with someone who was an established competitor with a cheaper material.

Q. Were there other cases like that particular instance you refer to?

A. Yes; I can think of the Kolb Baking Company, of Johnstown, Pennsylvania. There was the Hanley, in McKees Rocks, Pennsylvania, had three or four loaves that they put in wax paper, after having baked them at our promotion.

Q. What about the cases, Mr. Smith, where you had succeeded not only in selling the idea of the promotion of this type of bread but in using cellophane for that bread? Once the customer started out with cellophane, did he continue to use cellophane?

A. No, he didn't; not in many cases.

Q. What happened?

8663 A. Well, there is an interesting angle in connection with the variety bread business, Mr. Gesell, that obviously does not occur to someone who does not know the baking business. Variety breads are nothing but a change in taste, and they are a decided change in taste from white bread, and that is one of the reasons they are successful. But we would have a baker do this—I can remember this in the case of P. H. Butler, very well, and it happened all over the country,—we got him to put out a loaf of rasin bread, and he put it out once a week, on Friday, and he did very well with it. Well, then he decided that he was going to put it out on Thursday and get two days sale. And then he decided he was going to put it out on Wednesday and get three days sale. Well, you get awful tried of eating raisin bread three days a week, and what hapepned to his loaf of bread was that he just killed it by trying to sell that variety bread too often.

So when it went down he says, "I am either going to do one of two things; I am either going to take it off the market entirely, because I can't stand the price of cellophane with the volume at the point to which it has dropped, or I am not going to bake the loaf of bread at all."

Now this is a common situation with variety breads, that there is an obsolescense factor that has to be repaired or the volume goes down.

Q. What happens when the volume goes down?

8664 A. Well, when the volume goes down then costs go up, the cost of production goes up. And in our case we had to either replace that loaf of bread with another idea or we lost the business. Now what happened in this case, if it is of any interest, is that we said, "All right, what you ought to do now is put out a different type of bread, put out an orange raisin loaf." He put out that orange raisin loaf, and it was a very successful loaf of bread.

Now what we did then was to take that orange raisin loaf and ship it to all of our salesmen all over the country and say, "Here is a loaf of bread that is going very well in the Pittsburgh area. Why don't you get your bakers in other areas to put it out?"

And that was one of the methods by which we expanded that business.

Q. Now you have been talking about the period that you were in Pittsburgh. To what extent have those shifts and factors continued up to the present time in the variety bread field?

A. They have continued almost continuously, Mr. Gesell. At one time we had a very substantial business in, I believe it was 1935 or 1936, in the Oklahoma and Little Rock markets. We don't have any today down there. The bakers have just gone back to wax paper because they felt that they have got a sufficiently satisfactory volume to go to the cheaper wrap.

If you move down to Texas, you will find Campbell
8665 Taggert, who operate, I think, as I said before, in the neighborhood of 40 plants; they use over three times as much wax paper on variety breads as they do cellophane, despite the fact that from 1934 until the present time we have been trying to develop that business. They use it in the market side by side with cellophane, so they must have found a way.

Q. Are there certain bakers of specialty breads who have never used cellophane?

A. Yes.

Q. Can you give us an example?

A. I can give you one pretty close to home, probably one of the best-known loaves of bread in the United States is Pepperidge Farms whole wheat. They have never used a pound of cellophane on that.

Q. Have you tried to sell cellophane to Pepperidge?

A. With great vigor.

Q. What do they use?

A. Wax paper.

Q. Can you give us some specific examples of case histories where bakers of specialty breads have shifted one way or another between these competitive flexible packaging materials?

A. Well, I am just thinking of markets now, Mr. Gesell, I am thinking nationally, in terms of what has happened over the country. I spoke before of the Minneapolis area. We were
8666 around about 1935 and 1936 very well situated in that market in both white and variety breads. For a time there was no cellophane on variety breads used there at all; and we have gotten back into the market since then, but not to the degree that we were.

In the State of Kansas there was a good start in variety breads, and the bakers there reached an agreement on what they called standardization of costs, in the early thirties, and that standardization of costs is nothing more nor less than a point of view which says that the production cost of a loaf of bread shall be thus and

so. Well, that eliminated cellophane. Now we are back there to some extent but our business is not as good as it was in the late thirties.

Q. How much cellophane does Dupont sell for wrapping these specialty breads?

A. I don't know exactly. I would like to check a figure that I have on that, if you will permit me.

Q. Surely.

A. The figure last year was about 15,700,000 pounds.

Q. Of the total specialty bread units that are left, what percentage do you estimate are wrapped in Dupont cellophane?

A. We estimate in the neighborhood of 40 to 48 per cent, something in there, in that range, because that figure is never mathematically or physically accurate.

Q. To what extent do converters work on the develop-
8667 ment and sale of these flexible packaging materials for white bread and specialty bread?

Q. Oh, they work on it just as vigorously as we do. They sell directly to the end user in their own right, so to speak. I believe, but without knowing exactly what the figure is, that the converting industry supplies approximately the same percentage of the cellophane they buy from us to the specialty breads as we do of our total production.

Q. Do your figures on the percentage for white bread, of the units wrapped, and the percentage of specialty breads for units wrapped, include sales made by Dupont through converters?

A. Yes, sir.

Q. Now I want to turn to cake and sweet goods, the third section of the bakery trade. What are sweet goods?

A. Sweet goods, Mr. Gesell, as they are classified in the trade, are such things as coffee cakes, sweet rolls, buns, anything that is made from a basic sweet dough, which is a yeast raised dough, and the various flavors and various toppings put on it, to give a variety of products.

Q. What other flexible wrapping materials compete with cellophane in the same to cake and sweet goods?

A. The same identical materials that compete on bread; with this exception: There is a considerable amount of competition with acetate window boxes, on both cake and sweet goods.

8668 Q. In addition to the competition from wax paper and glassine?

A. That is correct, sir.

Q. What are some of the obstacles encountered by cellophane in competing for this particular market?

A. We have the same problems that we have with variety breads. We have the problem of whether or not a baker can use

this product of ours against the lower priced and, presently at least, very transparent glassines, and make a profit. If he is convinced that he can, to that degree we are successful. If he is convinced that he cannot, to that degree we are not successful.

Q. Has that cost obstacle existed throughout the period you have been acquainted with the sale of cellophane?

A. It most certainly has.

Q. Has the cost margin increased or diminished over the years?

A. I don't understand that, sir.

Q. Has the price of cellophane in relation to the price of wax paper and glassine come closer to the price of those materials or gone further from it?

A. Oh, yes. Yes, it has come considerably closer to the price of those materials.

Q. But you still have a cost obstacle?

A. That's right; we still have a cost obstacle.

Q. What have other manufacturers of these competing
8669 flexible materials done to further their sale to the cake and sweet goods trade?

A. They have recognized that with the improvement in their product—particularly I am speaking now of the improvements in the transparency of glassine—they have very vigorously competed on the basis, that they believe, and say so, in calls on the trade, that they can produce for the baker a cheaper package, give him more profitable volume, than we can. And to that extent it is simply a question of who can do the better selling job.

Q. They have been able to take business from cellophane?

A. Oh, yes.

Q. Has cellophane been able to take business from these other materials?

A. Yes, indeed.

Q. How frequently have there been shifts back and forth of business in this cake and sweet dough field?

A. There are shifts back and forth all the time, Mr. Gesell.

Q. What are some of the factors which have influenced these shifts of business between the competing materials?

A. One of the factors, of course, is the ingredient situation, which is a very important factor in low priced cake. In the days particularly when a cake was selling at five cents, if the cost
8670 of the material going into those cakes went up, if the price of sugar went up, or shortening went up, or flour went up, the baker had this kind of a choice: Should he give the consumer a small cake to sell for five cents, in order still to use cellophane, or should he remove the cellophane and give the consumer the same size cake, or what should he do?

Now in many cases, because he felt that he did not want to put a smaller unit in there, he removed the cellophane and used glassine.

Q. What other factors can you tell us of that have operated to bring about these shifts in business?

8671 A. One of the factors is the obsolescence factor in sweet goods also which is a very, very big factor.

Q. There is the same factor as operated in specialty bread?

A. Even more so.

Q. Can you give us some examples from your experience of particular accounts where this shift has taken place, and what the reason were?

A. Yes, I think so. In the cake field, the Continental Baking Company is probably one of the largest factors in the business. They use a great deal of cellophane on cakes and sweet doughs. But they also use a great deal of wax paper and glassine. And in different markets from time to time they have shifted back and forth. I am particularly at the moment referring to the shifts that have taken place in the Chicago market. You see, sir, in the baking industry, as I said before, the impact of what is done is felt so very quickly on the market, and when someone brings out a bigger cake, for example, as was done very often in that Chicago area, other people have to do something, if that bigger cake sells. They can't use more expensive material on a bigger cake and sell it at the same price; so they are forced to take some sort of action, and that action has often meant, and it did in the case, I am sure, of Continental, in some of the western markets, where they simply went out of cellophane. Now it was tempo-

8672 rarily in some cases. In other cases it has been permanent.

Q. Are there bakers of consequence who do not use cellophane on cakes or sweet doughs?

A. Yes, sir, there are.

Q. Can you give us an example or two?

A. Well, let us take, in Brooklyn, the Drake Baking Company. They are one of the better known cake bakers in the United States. They had for years one of the biggest volume items in their line, an item that they called Yankee Doodle, which was a five-cent seller. We had been trying for twenty-five years to get them to put that product in cellophane, and it has only been within the last six months that we have been able to get them to try it.

Q. What did they use before that?

A. They used wax paper and wax glassine.

Q. Are there any bakers whom you have never been able to persuade to use cellophane?

A. Yes, sir.

Q. Large bakers?

A. Yes, sir.

Q. Can you give us an example?

A. Up in Philadelphia is probably the most successful cake baker in the United States?

Q. What is his name?

A. The Tasty Baking Company. That is not my consid-
8673 eration. I have heard that stated any number of times by people in the baking industry who should know. They are probably the most successful cake baker in the United States. They could use, we estimate conservatively, several hundred thousand pounds of cellophane a year. Twenty-five years ago we thought they were a very good prospect for cellophane. We still think so, because operating in the Philadelphia market against cakes that are in cellophane, competing side by side, in stores, they still remain the most successful cake baker in the United States: and they have never bought a single pound.

8674 Q. What do they use?

A. They use printed glassine.

Q. How much cellophane does Dupont sell for cake?

A. I will have to check that, Mr. Gesell.

We sell for cake and sweet doughs combined about 22 million pounds.

Q. And of the total cake and sweet dough units what percentage is wrapped in cellophane made by Dupont?

A. We estimate between 45 and 50 per cent.

Q. What is the rest wrapped in?

A. The rest is either wrapped in Sylvania film or cheaper materials.

Q. Now turning to this whole baked goods field generally, Mr. Smith, has Dupont undertaken any particular special promotions to develop business in the baked goods field?

A. Yes, sir, we have.

Q. Do you recall a house to house promotion?

A. I recall it very well.

Q. Will you tell us what that was and how it promoted the sale of cellophane?

A. Yes, sir. I was assigned the job in 1938 when I was working on these industry studies of finding out just exactly why we had gotten precisely nowhere in the house to house baking field, and that is exactly where we had gotten.

Q. What percentage of the business is in house to house
8675 business?

A. About 16 per cent., it is estimated by the A. B. A.

Q. Who had the business?

A. The business was entirely in the hands of the wax paper and glassine and window box people.

Q. What did you do?

A. Well, we had this kind of a problem: A large wholesale bakery such as the General Baking Company, for example, will use cellophane on its cakes, let us say, or maybe some sweet goods or maybe some variety breads for the wholesale route, but goods baked out of the same bakery going to its house to house routes, he would use little if any, and we had, for example, a situation with Dugan Brothers who operate over a thousand trucks or did at that time in northern New Jersey, they didn't use cellophane, period. They just didn't use it, and we said to them, "But look what it may be doing in the wholesale?"

They said, "We don't want it."

We said, "It is transparent."

They said, "We don't need it." They said, "We have a profitable operation. We have a more profitable operation house to house than we have wholesale. We simply are not interested in cellophane."

Well, it was my job to find out why, and it comes back to this point, sir, that I stated this morning: That unless you know in this business what somebody's problem is you don't sell, and the reason that we didn't sell the house to house baking industry is that we didn't know that they had a problem and they didn't think so, either.

8676

Q. What did you do to find out?

A. I started to ride the trucks with the house to house bakery salesman. I think I made over four thousand stops.

Q. On the trucks?

A. On the trucks, and on those four thousand stops I timed the man at the door, I made a record of exactly what happened, what he did with his basket, where he held the basket, whether or not he took it to the door, what kind of statements he said, how many items he carried to the door. In other words, I made a complete record from four thousand calls of what happened at the door.

It so happens that the house to house bakery salesman didn't know either what happened at the door. We found out this: He had competition he didn't realize he had. He used to say to us, "I haven't got six or seven competitors standing at the door. Only my man is there and he knows the consumer and she knows him. She has a list of what we bake. We don't need fancy packaging."

What he didn't realize was that his salesman only got 29 seconds at the door; that if he didn't make a sale in the first 10 seconds he didn't sell at all; that between certain hours of the day he could see people and between certain hours of the day he could not, and he was restricted as to how many hours he could sell by union activity.

8677

Now, we made some tests with cellophane and visible packages doing the same thing, and we went to the house to house baker and we said, "Here, we have taken this data that we have gotten and made a training moving picture for your salesmen outlet, and these are our facts. You check them yourself. If you think this is the thing to do let us organize a better packaging program to fit into these methods of sales training"; which incidentally had nothing to do with packaging whatsoever.

Q. They were methods of selling?

A. That is correct, the correct method of selling at the door; because in door to door selling, sir, which I have done, the simple premise is the law of averages. If you do the right thing a sufficient number of times a day you can have a certain expectancy, and all we did in this survey was to bring to their attention the right thing to do, and we began to be successful.

Q. Did they all turn to use cellophane?

A. They did not.

Q. Did some of them use cellophane?

A. Yes, some of them did.

Q. What did the others do?

A. The others said, "These are good methods, but we
8678 will use wax paper, glassine, and window boxes"; and they did; and our position in the house to house bakery industry is approximately the same as our position in the wholesale industry.

Q. What percentage is that?

A. Well, about the same percentage in these various items; in other words, about 45 per cent., roughly, in variety breads, 43 to 48 per cent. in sweet goods, something like that.

Q. Do these bakers that are not using cellophane use other materials?

A. Yes, they do. There is a great deal of acetate window boxes used for cakes that are priced over 10 cents.

Q. And to what extent do these bakers use your selling methods that you developed after these four thousand calls?

A. They are still being used, sir. The General Baking Company only last week, I believe, requested a print of our film that we called "Split Second Selling," I think it was, yes, to use in their house to house training operations.

Q. Used by bakers who do not use cellophane?

A. Yes.

The COURT. We will recess this case until Wednesday, April 2nd, at 10 o'clock.

(At this point the trial was adjourned to Wednesday, April 2, 1952, at 10 o'clock, a. m.).

8680 WEDNESDAY, APRIL 2, 1952, 10:00 O'CLOCK A. M.

Present: As before noted.

R. R. SMITH, resumed.

DIRECT EXAMINATION (CONTINUED)

Mr. GESELL. We continue this morning, your Honor, with the testimony of Mr. Smith. If agreeable with the Court, I would like to mention an arrangement that Mr. Minicus and I have reached with respect to witnesses this week. We have an out of town witness, Dr. Davidson, of Carbide, who I do not believe will be on very long. Mr. Minicus and I have agreed that we can fit him in between Mr. Smith's direct and cross tomorrow morning, if it is agreeable with the Court, so that he can return to his business, because I guess Mr. Smith will be on most of the day today on direct.

The COURT. I want to have an off the record discussion about that.

(Discussion off the record.)

Mr. GESELL. Now just briefly to recapitulate for about one minute, your Honor, Mr. Smith's testimony to date is to the effect that about 95% of Dupont cellophane is sold for packaging purposes and 78% for food of various types, and in his testimony so far he has covered the major use for cellophane, which ac-

8681 counts for 20 to 25% of Dupont's business, the bakery industry, and has covered specifically white bread, specialties, cakes and sweet doughs, sales to those three combining to make around 46 to 47 million pounds of business, or from 20 to 25% of Dupont's total business; and of course he is discussing various obstacles and competitive conditions.

The COURT. Mr. Gesell, what is this exhibit that is going on in Atlantic City?

Mr. GESELL. That is the so-called packaging show, your Honor, which is an annual affair, at which all manufacturers and many converters and even, I think, some users of packaging materials exhibit their goods.

The COURT. Is it still going on, do you know?

Mr. GESELL. I think it goes through Friday, your Honor.

The COURT. Do you think it would be of help for me to go down and go through that exhibit?

Mr. GESELL. Well, your Honor, we had wondered about suggesting that to your Honor. I have not seen this particular exhibition, but I understand that there are exhibitions there by all users,—I mean by all manufacturers of these materials. You will

see examples of converted items. And that it is a place where all of these various packaging materials come into focus. If your Honor wished to go down, we would be quite prepared to work that out.

The COURT. Of course, according to Mr. Minicus's theory,
8682 it would be highly irrelevant.

Mr. MINICUS. On the other hand, your Honor, I think that show might give a very good insight to all of us into these matters we are discussing. As long as they are all being offered in evidence, we might all see what they are all about.

The COURT. Should we plan to go down Friday? Do you want to go, Mr. Minicus?

Mr. MINICUS. I would like to go, very much.

The COURT. How about you?

Mr. GESELL. All right, your Honor.

The COURT. What will we do? Get a bus?

Mr. GESELL. Why couldn't I arrange for a car?

The COURT. Transportation?

Mr. GESELL. To take both government counsel and ourself and your Honor and anyone else. I suppose driving is the quickest way to get to Atlantic City.

Could we do this, your Honor? Could I make inquiries in the lunch hour as to when the show is winding up and what is scheduled for Friday and what the transportation arrangements might be, and then I could discuss that with the Court when we come back in after the lunch hour?

The COURT. Very well.

Mr. GESELL. I know there is a Dupont exhibition down
8683 there. In fact, your Honor may have noted some reference to it in the local papers last night.

The COURT. That is what brought it to my attention. I don't insist on it; if it is going to cause any inconvenience to the parties, let us forget it.

Mr. GESELL. Your Honor, I don't feel that way about it. Perhaps it is a little like Judge Medina's recent feeling that he wanted to get into an investment banking house and see an issue syndicated and closed, which I read in the paper. Why don't I inquire over the lunch hour, and we will discuss it again after the recess?

The COURT. Very well, sir.

8684 Mr. GESELL. Now, at the close of our testimony on Friday, Mr. Smith had discussed the house to house bread promotion and earlier in his testimony had discussed the specialty bread promotion.

By Mr. GESELL:

Q. Mr. Smith, did Dupont have any special promotions with respect to sweet goods?

A. Yes, we did.

Q. Will you tell us briefly what that promotion was, what its purpose was, and how it was carried out?

A. In 1933 our Sales Manager had been looking over the baking industry for possibilities for growth. At that time three of the major ingredient companies, that is, the makers of shortening, flour, or yeast were very active in the promotion of increased production of sweet goods through retail bakeries because they felt that was a wide opportunity for the expansion of those items in retail bake shops. They did not particularly interest themselves in the wholesale end, and we saw that as an opportunity for the expansion of our business, because we felt there were profit possibilities for the baker there.

Here is what we did:

We went to one of the major yeast companies and they prepared for us a basic sweet dough formula. That meant that we
8685 could go to the baker and present to him a formula for baking these sweet goods, and merely by changing the shape or cut-out boxes or ingredients or flavoring he could make a variety of sweet goods.

We also presented market facts to him which showed him the size of that market. For example, I believe it was in 1933—and this gives you some idea of how underdeveloped the market was—in 1933 it required approximately 65 grocery stores to equal the sweet goods sales of the average retail bake shop. I think I can give you another example:

In Pittsburgh there was not one major baker who was baking sweet goods as a line. There were two plants of Ward there and one of National. The largest independent was the Braun Baking Company. None of them baked sweet goods. They did in this respect: They put out a few hot cross buns on Good Friday, but that is all. They said it was a retail business.

To make a long story short, we took this basic story of the market possibilities, took the formulas which they could immediately put to work, and tried to promote the sale of this product, and we were successful all over the United States. We created a very substantial amount of cellophane business. There isn't any question about it. But at the same time we ran into the identical sort of problem that we ran into in the variety bread field, that when a baker decided to make a line of sweet
8686 goods he would not necessarily use cellophane; he would choose very often glassine or very often the translucent wax paper, and after he had decided to make this move in the

expansion of his business it came down to a question of who was going to get his packaging business.

Q. How has that developed over the years? Has Dupont secured the bulk of that business in sweet dough?

A. No, I would not say so. I believe I testified, for example, that the Campbell, Taggert Bakeries in Dallas, Texas—and this is a good example—today use, I think, approximately three times as much glassine and wax on their sweet goods as they do cellophane. It has been a constant struggle to maintain our share of the percentage, and we estimate we have approximately 50 per cent.

Q. To what extent had these other manufacturers worked on the promotion of this sweet dough business as an outlet for their materials?

A. Well, they were active, although not precisely in the same way. Our original efforts, as I explained, were to get the industry started.

Q. That was my question. Did they participate in getting the industry started?

A. If they did, sir, I have no knowledge of it.

Q. Now, in this connection, Mr. Smith, one final question before we leave baked goods. Were there any developments by Dupont which contributed to this industry by way of the
8687 development of a new type of film?

A. Yes, I would say so.

Q. Can you give us an example of that?

A. Yes. One of the major packaging problems that we had with the original type of moistureproof film that we made was in the packaging of doughnuts, particularly sugar doughnuts where the moisture protection was too great and the moisture came to the surface of the doughnut, the sugar dissolved, and the product looked soggy and it would not sell.

Q. Mr. Mitchell has told us about the research aspects of that development. I would like to ask you to what extent that doughnut film in your opinion contributed to Dupont's sales?

A. I think it contributed very materially to our sales in the doughnut field, because for a period of time there we lost a great deal of our original doughnut business to glassine lined boxes, and we were able to get it back when we could produce a film and show the baker we had a film that would keep his product in good shape.

There is another type of film that we developed for the cake industry which I believe has helped us a great deal, and that is what we call M. S. T. 52. When we started out to sell in the cake field we had one moistureproof film and we sold it as a film for all purposes in the early days. But it was found out that it did

8688 not do the best kind of a job because it would cockle and it would pucker, and we lost business to glassine in many cases because of the appearance of the product. When that film was developed I think we improved our position very materially in the cake field.

Q. Mr. Smith, I want to turn to meat and leave baked goods. How much cellophane does Dupont sell for meat?

A. Approximately 19 million pounds.

Q. What has been the nature and extent of your experience in selling cellophane to the meat trade?

A. Oh, when I was in the territory in the Pittsburgh area, there were about 19 independent meat packers in that area. There were branch plants of Armour and Swift & Company which I covered.

When I was in Chicago I was personally responsible for the sale of our product to the big four meat packers; that is Swift, Armour, Cudahy, and Wilson. I had been acquainted with the operations of what is known as the little four through my supervisory activity. In the central district the little four are known as Hormel, Kingnan & Company, the Rath Packing Company, and John Morell. They are known as the little four.

I have also had experience with many of the independent packers in the middle west.

In addition to that I was delegated in 1938 to make a very intensive study of the distribution practices and sales
8689 in the meat industry with the idea of discovering why we had continued to lose business.

Q. What are the principal classes of meat for which cellophane is sold as a packaging material today?

A. You can divide that broadly, I think, into two classifications, two broad classifications as fresh meat and processed meat. In the fresh meat field you have the obvious items such as beef, veal, pork and lamb sold in the fresh state. In the processed meat field we have a tremendously wide variety of items, but the principal ones are bacon and pork sausage, picnics, hams, and then there are a large number of items that are known as sausage specialties, which are combinations of beef, veal, lamb and pork processed into a particular item which you might say corresponds to the sweet doughs of the baking industry. They are specialties.

Q. Over what period, Mr. Smith, has Dupont attempted to sell to the meat trade?

A. We have attempted to sell to the meat trade, to the best of my knowledge, from the very beginning of our manufacture of cellophane in this country.

Q. What, over the years, has been the trend of Dupont's cellophane meat sales?

A. We built up our meat business to the point where in 1933 it was one of the biggest items—biggest industries we served.
8690 There was 2 million pounds sold to that industry, over 2 million.

Q. That was in 1933?

A. That is right, sir.

Q. After that did the amount continue to grow?

A. No, it did not. The amount actually continued to decline, and it declined to the point where it was almost fourteen years before we reached the level that we had reached in 1933.

8691 Q. About 1947 you were back up to around two million pounds?

A. That is correct, sir.

Q. And what did you say the sales were today?

A. Our sales today are 19 million pounds approximately.

Q. What types of meat were first packaged in cellophane? Was it the fresh meats or was it these processed meats?

A. No, it was the processed meats. The main item, of course, being sliced bacon.

Q. And at that time, back around 1933 and the years immediately subsequent thereto, what were the other flexible packaging materials, if any, which were used for the purpose of wrapping the meats that cellophane was wrapping?

A. Well, the major items that competed in that field were greaseproof paper, parchment, and glassine, on these pork products I am speaking of, these processed products. They had practically 100% of that business.

By the COURT:

Q. Mr. Smith, will you take for me the journey of a piece of meat from the stockyard until it goes to the housewife's table, and where the cellophane enters the picture? Armour, we will say, slaughters the steer?

A. Yes.

Q. And then what happens?

A. Well, Armour buys a steer at auction, and then he
8692 puts it through a series of processes through the plant. Then he may send that steer,—and we are speaking of beef now, sir,—he will send that steer out to either his branch houses for distribution to retail stores, or he will employ a system of what is called car route distribution, which is a major system of distribution in the packing industry. That is nothing but a railroad car that travels back and forth under refrigeration from, we will say, the main stockyards in Chicago to an isolated area where the contents are redistributed after having been sold by the salesmen. Now in the branch house he will send whole-

sale goods, and those wholesale goods are then cut up into retail cuts and sent out to the retail stores.

Q. When is cellophane applied to that product?

A. It is applied to that——

Mr. GESELL. Your Honor is talking now about this——

The COURT. I am taking bacon, for example.

By the COURT:

Q. When is the bacon wrapped in cellophane?

A. Well, it is wrapped in cellophane at two points, so far as the packer himself is concerned. It is wrapped at Chicago, where it goes out on these car routes I spoke of, and in branch houses they have wrapping operations where they ship bacon in any large quantities. They have refrigeration facilities there,

8693 and they do slicing and wrapping operations at the branch level.

By Mr. GESELL:

Q. Now in the case of the steer, or the fresh meat, where does the wrapping take place?

A. Oh, in the case of fresh meats, the packer does absolutely no packaging of that at all. His whole system of distribution just simply will not permit it. It is the retailer who does that packaging, and it is all done at the store level.

By the COURT:

Q. And he in turn purchases his cellophane from what has been termed here either a jobber or converter?

A. No; he purchases cellophane in that particular operation, your Honor, principally from the manufacturer, because it is not converted cellophane, it is unprinted cellophane.

Q. In other words, would he purchase it from Dupont?

A. From Dupont or from Sylvania or from Goodyear, whatever he chooses to use.

The COURT. I just wanted to fill that picture in.

Mr. GESELL. Yes. Actually, your Honor, that is an important question as to each of these things, because the distribution is different.

The COURT. That is what I wanted to know.

By Mr. GESELL:

Q. What obstacles, if any, did Dupont encounter from

8694 buyers in attempting to sell against glassine and greaseproof and parchment for bacon and other processed meats?

A. We had the basic hurdle of price, which, at least in my estimation, and in my experience, has been a more vital factor than in any other industry we have actually tried to sell our product in,

because, for this reason, that the packing industry, by its nature,—its entire concept is built on the basis of buying a product for as little as they can get it for, at auction, and the tradition of the retailer has been to buy just as cheaply as he possibly could; and I think it is a fair statement to say that the housewife in turn has shopped around to buy meat just as cheaply as she possibly could. So that that has developed a price consciousness, which gave us this problem. The packer said that if I have to use cellophane, or if you want me to use cellophane, I have no alternative but to charge more for my products, and if I charge more for my products and my competitor does not, he will get the business. That is the kind of business this is.

Q. And these materials, I take it, were lower priced than cellophane?

A. Considerably so.

Q. Were there packers who actually bought cellophane and used it and these other wrapping materials at the same time for the same product,—let us say, bacon?

8695 A. Yes, they did. We had by 1933, I think, practically every meat packer in the country who had a line of cellophane-wrapped bacon and pork butts and some sausage and various specialty items. They all had a line. But the situation is quite different than in the baking industry, where, for example, the General Baking Company would not take Bond bread and send it out to the same store and say to the baker, you can have this in cellophane at ten cents today and I can give it to you also in wax the same day for eight cents. But that is what the packer did. Every item that he put in cellophane, be upcharged, and in his price list which his salesmen carried it would read something like this,—cellophane, bulk, so much; cellophane, parchment wrapped,—or rather bacon, parchment wrapped, four cents a pound cheaper,—more expensive. But then when he got to cellophane he was charging five to six cents a pound more for the same identical product, the same brand on that product.

Swift & Company, for example, with their Premium bacon, would sell Premium bacon in bulk, in greaseproof, and in cellophane, at the same time, at three widely separated prices.

Now that was the basic problem that we ran into, because we were saying to the packer, after he got some products into cellophane, push the cellophane wrapped package; and he always said that we can't push it if the dealer will not buy it.

8696 Q. Prior to the war, what was the greatest percentage Dupont was able to obtain of bacon and smoked meat business?

A. The best estimate that we were ever able to make prior to that time was somewhere between five and ten percent.

Q. And the remaining 90 to 95% was wrapped in what?

A. The remaining 95% that was packaged was wrapped either in Sylvania or in cheaper materials.

Q. Were you able to hold that business that you did get for bacon and these other processed meats?

A. No, sir, we were not.

Q. Why were you not able to?

A. We were not able for two reasons. In the first place, the packing industry was able to buy from Sylvania converters printed cellophane for bacon and other items considerably cheaper than they could secure them from Dupont converters. It represented a very nice business, and the Dupont converters would have liked to have it, but they simply could not meet the price, and on converted film, that is, on printed wrappers for bacon, we lost out completely.

We also lost out on the direct basis to Sylvania in the Big-Four packers, and also for a period of time with the Little-Four packers, on unconverted cellophane that we sold direct. Now they bought a very sizable quantity of plain sheets of P. T. sheets, which are greaseproof for wrapping what they called second and third
8697 brands of bacon. Now Sylvania took that business just 100% for two reasons.

In the first place, they were able to guarantee to the packer,—and this I am stating now from our experience in dealing with the purchasing departments—guarantee to the packer that he would always be able to buy second class materials, which carried a discount, I think, at that time of something like 15 to 20%. We could not make that guarantee, because we did not always have second class material, and when we did not have it we did not sell first class material to anyone at the second class price, and we lost the business.

The second thing was that I think Sylvania's policies were more flexible than ours, in this respect, that our price list at that time called for shipments in 500-pound quantities, and in 100-pound quantities, and in less than 100-pound quantities. If anyone ordered in less than maximum quantities, he had to pay the premium price. For good and sufficient reasons, Sylvania did not have that policy, and it was easier for the packing industry to buy from Sylvania, for that reason, among others.

Q. Was this loss of business that you are describing due entirely to inroads that Sylvania made, or were there any other factors?

A. No; there were other factors.

Q. What were they?

8698 A. I think that the principal one that affected the actual use of cellophane, both Sylvania and ourselves, was the adoption by the packing industry in about 1935, I think, in that

area, of what is called the platter pack. Now the platter pack of bacon is nothing but a sheet of parchment that is laid out flat, parchment or greaseproof paper; the bacon is sliced and laid out in long rows, and the ends are simply turned over; the name of the packer appears on the outside. The meat packing business was so completely competitive that that idea started and just swept right through, and there was a decided decline in the use of not only our cellophane but, I am sure, of Sylvania's cellophane, during that period, and right up until the time of self service meats.

Q. Was that package cheaper or more expensive than the cellophane package?

A. The package was considerably cheaper than the cellophane package.

By the COURT:

Q. What did you say this material was in that package?

A. It was a greaseproof or a parchment sheet, your Honor.

By Mr. GESELL:

Q. Was it about this time that you made the market survey which you described earlier?

A. Yes, sir.

Q. With respect to the meat industry?

A. Yes, sir.

8699 Q. What conclusions did you reach as a result of that survey with respect to cellophane's opportunities for sale on these various types of processed meat, particularly bacon?

A. The conclusion that I reached, and which I made to our management, in the form of a recommendation, was that we not spend a single solitary penny in the promotion to the meat packing industry as long as we were contending with distribution practices which the meat industry could not avoid but which were positive, absolutely positive, deterrents to any progress at all. As a matter of fact, we got to the point where for two years we secured no business, no business whatsoever, from the Big Four meat packers, and a little later than that we called on them three times a year merely to shake hands, because we had nothing to sell.

Q. What do you mean, you had nothing to sell? They were packaging, weren't they?

A. Yes, sir, they were packaging, but they were packaging—where they were using cellophane, they were packaging in a Sylvania film. They were able to buy at prices that we could not give, so we had nothing to offer at that point. While they had a long line of materials in cellophane, we could see no possibility of changing this distribution system, which was the main deterrent to any advance in packaging that we could see.

Q. The other materials continued to be sold; is that
8700 right?

A. Yes, they did, because they fitted precisely into that distribution pattern.

Q. When did you say this was? This two year period?

A. Well, the two year period where we got no business at all was in about 1938 and 1939.

Q. Can you give us an example or two, Mr. Smith, of accounts which were using cellophane and shifted to this platter type pack that you are talking about?

A. The entire industry shifted. You can name any meat packer in the United States, and he shifted.

Q. You have described the great growth in your meat business which has taken place in recent years. What factor has been responsible for that rise in Dupont's cellophane business with the meat industry?

A. I would put that as almost 100% the development of self service meats.

Q. Will you tell us what if anything Dupont did to develop the self service meat business, how long you worked on it, what kind of steps were taken to promote it, and how, if it did, it benefited your sales?

A. I believe I am correct in saying that we began to try to package red meat back in 1928, and we tried various experiments, and they were failures. We finally got to the point in 1933 where one of our two specialists who had devoted practically all of
8701 their time to what we called visionary products in those days was able to induce H. C. Bohank & Company, of Brooklyn, to centrally package a line of red meats, steaks, chops, and roasts, and that sort of thing, beef, veal, and pork, at a warehouse, and send them out to fifty stores.

Q. That was in 1933?

A. That was in 1933.

Q. How did that experiment come out?

A. That experiment failed miserably.

Q. Why?

A. Because, in the first place, the film was wrong, and it turned the meat black in a few hours. In the second place, there was no refrigeration. And in the third place,—let me amend that by saying there was no proper refrigeration. And in the third place, women would not buy meat that way. They wanted a butcher to cut the steak in front of their eyes, and that is the way they wanted to buy.

Q. What did you do following the failure with that experiment, if anything, to promote the sale for fresh meats?

A. Well, these two men that I speak of as specialists, who devoted many, many years to this, kept on experimenting. Most of us, I know I for one, who were engaged in the more prosaic kind of packaging at that time, we thought that they were just a little crazy, and most of the meat industry did too. Fortunately, our management did not. However, they continued to find peo-
8702 ple who were willing to experiment. They experimented with some A. & P. outlets, where they could find a meat manager who had some vision, and gradually they learned a little more about the behavior of meat.

Now they did such things as this. They would try to develop packages, for example, where the suet could be wrapped entirely around the meat, so that the film did not have to come right in contact with the meat itself. They tried to develop packages where a tray would raise the level of the film about a sixteenth of an eighth of an inch over the meat, so it would not come in contact. To make a long story short, during these experiments they learned a great deal about the behavior of the meat, and I think it was that, if nothing else, that, when the time came, permitted our research people to develop a meat film in such a remarkably short period of time as other developments did.

Q. When did this meat business, as the result of this twenty or more years of promotion, catch hold?

A. Well, it began to catch hold about—or, let me put it this way,—it began to assume some distinct possibilities about 1940. At that time there had been a big shift to the self service food store, and traffic was beginning to pile up, and the food store industry was worried about that, because they couldn't move people very fast through the self service butcher shop. We started to try this again, and this time I know these men, one in
8703 Uniontown and one down in Long Island, somewhere, took an old dairy case and cut the top off it and just filled it up with ice and packaged meat, and they wanted to see what would happen.

This time women would buy it, because they had been accustomed to buying self service. So we knew then that if we could develop a film and if we could develop proper refrigeration, and then if we could develop all the other factors, that there was a distinct possibility of developing a new business.

Now at that time they went through to the refrigerator companies, and after having had experience with the problems they lined the thing out with the refrigerator companies, who started to work independently on developing the proper refrigeration for open self service.

Q. What else was done to develop this business?

A. Well, we finally got a film, about 1942 or 1943, that looked like it had possibilities, and I can remember, because I was in Chicago at the time, we took that film down to the Kroager Grocery & Baking Company, in Cincinnati, who have one of the finest food laboratories in the United States, to test it out, and they tested it out, and their findings were that it looked like we had finally come up with a film that would hold the color of red meat for approximately 72 hours. And at the same time we came up with another film that was designed for luncheon meats.

8704 All we had at that time, however, was the film.

Q. What did you do to get some business?

A. Well, that is a good point, because there were not any customers. There were not any such thing as self service customers. There was no outlet for it. So we had to develop them. One of the ways that we developed them was to start putting up test installations throughout the United States, which these specialists did, in conjunction with the case people. I believe they had four or five of them established that were running experimentally for a while, because there was a tremendous amount of information that had to be found out about this thing. It was not, you see, a case of wrapping meat; it was transferring a manufacturing operation into a butcher store and trying to make a manufacturer, in effect, out of the butcher.

Q. Will you explain what you mean by that?

A. Well, in the self service meat operation, what actually has to take place is a manufacturing and control operation, from the time that meat is first taken out of the cooler in the back of the store and cut and packaged and weighed and priced and put into an open refrigeration case.

Now a lot of things can happen to that thing. If the case, for example, is not properly policed, and meat is piled three deep

8705 where it should only be piled two deep, then obviously the item on the bottom remains longer than it should, and discoloration takes place. The package either has to be rewrapped or the item thrown away. So that case management was a very distinct problem and still is.

The other problem was cutting. You can't cut self service meats the same way you cut from the ordinary service case. And our man in Chicago, I know, in 1944, worked very closely with the meat cutting expert from the American Meat Institute, in order to develop what were the best cuts for self service meats. And there is quite a difference. I am not an expert on that, so I can't tell you, but there is a very big difference.

Another factor had to be developed which was the accounting procedures in this operation. The accounting procedures in the retail meat industry,—and I think that they will admit this,—were

fairly loose; but when it came to establishing the self service meat operation in a large market, there might be an investment of '40 to $50,000 in cases, there might be a tremendous amount of additional space for coolers and cutting rooms; so we recognized that if a big outfit such as the A. & P. or any of the big chains were going to go for this, they would have to have some basis for an answer to the question that they would ask, which would be this, how much is this thing going to cost, and is it worthwhile making the switch?

8706 Now that was a problem that confronted us while I was in Chicago, and I can recall very distinctly a discussion that I had with our specialist in Chicago, with Mr. George Clements, who was executive vice president of the Jewel Food Stores, and Mr. Merrill Morse, who was vice president in charge of store operations. We went down to them and said, here, we think this is a good deal, but we don't know, and you don't know, because you don't know whether there is any money in it, and frankly neither do we. Now let us set up to find out. There we established in one of their stores, and they turned over their entire accounting procedure to us, a test procedure, that lasted for four months. We had to establish a new accounting system, in order to arrive at the costs that we were to get, and, to make a long story short, when that test was over we wrote a very voluminous report to Jewel, and I received a letter, I can remember, from Mr. Clements, who said at the conclusion of it that the conclusions that you have reached about this operation seem very sound to us, and I think it is something that Jewel should get into just as quickly as they possibly could.

8707 Q. Well, now, can you tell us, Mr. Smith, in 1942 how many self-service meat stores there were about?

A. There weren't any in 1942.

Q. How many are there today?

A. There are over—by the last count there are about 4,200, I believe, 100 per cent. self-service meat operations, but there were established, Mr. Gesell, primarily because these specialists took our entire sales organization and trained them in methods of opening up a self-service meat case and a self-service meat operation. Then we picked 125 major cities in the United States and we set up as a goal a simple pilot operation in those stores, and the amazing thing—and it has always been amazing to me—is that in the year 1946 out of some 300,000 odd stores that sell meat in this country there were only sixteen 100 per cent. self-service meat operations.

Q. What type of packaging material was required in your judgment for this class of self-service meat business?

A. In the packaging of red meats a material had to be developed that while it had nothing whatsoever to do with the preservation of the quality of meat, it had to preserve the color of that meat, the red bloom that a piece of beef acquires after the proper exposure to the air, for at least 72 hours. That is was is called the case turn-over period. If it is less than that it won't
8708 stay there long enough to sell, but will darken.

Q. For fresh meats what other qualities are desirable?

A. Well, you have to have a package that can be completely sealed, because the woman picks it up and she doesn't want blood running down the side when she puts it into her basket, and you have to have also a proper label, which will be a thermoplastic, and there was a great deal of development work done with that, incidentally. You also have to have a film that is sufficiently moistureproof so that the meat won't dry out, but also not so moistureproof that it will develop slime or mold; and up to this point we had felt that it practically had to be a transparent package on red meat, because the whole tradition of meat buying as long as people have been people has been to see red meat.

Q. Are there other materials other than cellophane which satisfy from the user's point of view these characteristics?

A. Yes, there are.

Q. What are they?

A. There is some acetate film used, though not very much. But there is a substantial amount of pliofilm used and there is also a substantial amount of a Sylvania film used that is a similar type film to ours.

Q. To what extent, if any, did acetate and pliofilm take advantake of this fresh meat development that you have
8709 described?

A. Pliofilm particularly, as I recall it, having seen these pilot operations around the country sent film also down to the Kroger Grocery & Baking Company for testing on red meat, and their report at that time was that that film was a complete failure. That was about 1943 and through there, 1944. However, pliofilm have developed, and developed less than two years ago, a film for red meat that keeps the color of the meat, does an excellent job of packaging, although we don't think as good as ours, but the buyer does, and have made, frankly, very, very substantial inroads in the meat business.

Q. What are some of the characteristics of this pliofilm meat material which have given it this acceptance in the trade. You have mentioned, of course, that it was visible and had protection. Are there other aspects to it?

A. Yes, the buyer says there are. I think I can best explain that by reciting an incident that happened about, I think it was,

early last year or in the very late months of 1950; I can't recall. But the head of the National Meat Department—rather the assistant head of the National Meat Department of the largest single user of film for meat packaging in this country came to Wilmington and he came to Wilmington to talk to us about pliofilm and why they liked it, because we had spent a good many years
8710 in working with this particular company in the development of this self-service meat business, and here is what he said, and I was present at the time:

He said, "We are going to use pliofilm for a number of reasons: In the first place it is tougher. When you put it on the heavier cuts we don't get as much breakage as we get with cellophane. Women don't poke their fingernails through it. In the second place, we don't have to turn it over when we put it on red meat."

Our film is coated on one side, but it is not coated on the other. If you put the coated side next to the meat the meat will turn dark. So you have to put the uncoated side next to the meat.

He said, "Our operators get this mixed up, and in the case of pliofilm they just pick up a sheet and they don't have to look at what side it is; they just put it on."

He said also that pliofilm is a one-sheet proposition; that is, it can be used on luncheon meats and on smoked meats and even over in the cheese department; wereas in your case we have to use—and it is true—they have to use a special film for red meats, and we have a special film for luncheon meats, and then we have another film for cheese. So instead of a one-purpose film we have three films, and in the average large store operation it makes it rather difficult, he said, for them to operate with the calibre
8711 of help they could get.

Now, when he said that and when he said that they are buying it as every chain has bought it in large quantities and continue to use it, I took the point of view that we had a job on our hands to protect our position in this meat industry after it had only been developed about two or three years before.

Mr. MINICUS. If your Honor please, before the witness goes on from the point he has just been making I would like to point out that all of the statements were hearsay statements made by some person outside of this courtroom at some earlier date. I will not object and ask that they be stricken providing the witness will at least identify the company and the speaker.

The COURT. Are you willing to cooperate to that extent, Mr. Gesell?

Mr. GESELL. I am going to ask him.

The COURT. All right.

The WITNESS. Yes, in this particular case I will. The man I have in mind was Mr. R. W. Carpenter, who is assistant head of

the National Meat Department of the A & P Tea Company with headquarters in Chicago.

By Mr. Gesell:

Q. What has been the trend of pliofilm prices?

A. The trend of pliofilm prices has been over the
8712 years downward; and on the other hand they have within the past few years been upward, and they have increased, I think—I am just guessing on this now—I think three of four times during the period of a year or so.

Q. Taking into account these various factors you described, quality factors, how does the cost of pliofilm compare for the wrapping of fresh meats with Dupont cellophane?

A. Well, the cost of pliofilm is higher actually from the standpoint of buying it per pound or even buying it on the area basis, but it must be the reason of the buyer that his consideration is not what he actually has to pay for it, but obviously what he gets for it in the way of value after he buys it.

Q. You mentioned the A & P situation. Following that conversation to what extent did they become large users of pliofilm?

A. I cannot answer that question in specific terms. I can only say this: That every large user—or every user—I will not exclude any to my knowledge—of meat film for self-service meats purchased pliofilm in some quantity and in some cases in substantial quantities within the past year and a half, and I don't know of anybody who is going to throw it out completely.

By The Court:

Q. I am having difficulty following this line of testi-
8713 mony, and perhaps there is an explanation for it. You started out trying to put cellophane over in the meat industry and they said that it was too expensive, yet they came along with pliofilm, which is more expensive than cellophane, and now you say they are buying pliofilm?

A. Yes, that is correct, sir.

Q. It seems to me a contradiction.

A. That is correct, because originally——

Q. Not on your part, but on the part of the A & P, for example. I don't understand their psychology.

A. Well, I think perhaps I can explain it to you this way: That when A & P package meat at the store level in a large cutting room, we will say, back of a large market they are the retailers, and they were always the retailers when they bought it from the packer and their meat was always displayed to the consumer when they bought it from the packer, because if they bought bacon, for example, not sliced they would slice it themselves and lay it out. But the basic difference, sir, has been that there has been a trend

in the direction of self-service meats which has required a different kind of merchandising, and because retail stores are so competitive and they are competing essentially for the favor of people, and evidently again because women like to buy this way, their standards and their concepts of packaging have changed.

But on the other hand, sir, you have the same con-
8714 dition prevailing within several hundred thousand stores in the country that are not self-service, the old service type, and those same competitive conditions between greaseproof and parchment and cellophane prevail through those types of outlets.

By Mr. GESELL:

Q. Is price, Mr. Smith, the only factor which determines whether or not the buyer will use one material as against another?

A. No, it is not. There are a great many different factors. The price of a material is only the starting point. I think every buyer, large and small, has got to take the point of view and does that he has a certain problem in his business that packaging will solve if he gets the right material. Now, depending on how important that problem is, in some cases he is going to pay more for a material than the other, but only because it must be worth it to him. It has to be worth it to him.

Q. What do you mean "Worth it to him"?

A. Let me put it this way——

Q. What factors does he take into account that will make it worth more to him?

A. Well, let us stay in the meat business for a moment.

8715 Q. If you will, let us take this very situation that the Court pointed your attention to. What are the fatcors that lead a buyer to take pliofilm instead of cellophane when pliofilm costs more, for fresh meat we are talking about?

A. Well, I mentioned two. One is the fact that if he wraps a large piece of meat and a bone sticks through, it is a re-wrap; so he either throws that piece of meat away if it gets dark, or if his case is carefully managed he has to pick it out, go back and re-wrap it, take it back and put it in the case, all items of cost. If pliofilm or any other film eliminates the breakage, that item is taken care of, so he is willing to pay more, obviously, to eliminate that hazard.

Then he has the matter in the store of production per employee, hour, for example, and if with the one sheet he can put it on cheese, luncheon meat, and on fres' meat, even if we don't think it is the thing to do, he gets a more efficient operation and he takes less of a gamble of the wrong side of the sheet getting on one meat and the wrong sheet getting on the other, and he has greater

efficiency and greater production; and for that some of them are willing to pay. Those are the kinds of factors that enter into consideration of a price of a material as such.

Q. Can you give us from your experience an example of customers who have shifted to pliofilm for fresh meats from Dupont cellophane?

A. I don't think, Mr. Gesell, there has been a 100 per
8716 cent. shift in any case.

Q. Well, within particular accounts has the relative percentage of pliofilm or cellophane shifted?

A. Oh, yes.

Q. Can you give us examples where the percentage of pliofilm has increased and the percentage of cellophane has diminished within a particular account?

A. Yes, I think I can, and in this case I feel quite confident in laying a blanket over the entire usage of the film—rather the entire usage by the self-service meat industry. Every major user increased his percentage of pliofilm last year. Now, I want to make this point clear, that shortage got pliofilm in originally.

Q. You mean the inability to supply cellophane?

A. Yes. It merely accelerated their ability to get into the field.

The COURT. Refresh my recollection: Has it been established in this record that pliofilm has a greater tensile strength than cellophane?

Mr. GESELL. There is quite a good deal of material on that, and the witness has said that it is a tougher material.

The COURT. That is all.

The WITNESS. I think perhaps the best indices that I can give you, at least the best that I have, I will be very
8717 frank to say I don't know how much was used last year by industry except we estimate it to be two to three million pounds, which is roughly about 30 to 40 per cent. of the amount that we sold; and we may be wrong on that, but there crossed my desk about four days ago a report that was issued by Mr. Robert Jackson, who is Secretary of the National Association of Food Chains, in which he sent to us, as I am sure he did to the other material suppliers involved, a report of the requirements of the chain store members who are members of that group for film for the next year, and if this is an indices, and I think it is, it indicates the penetration of pliofilm.

Mr. MINICUS. It is necessary to object to this evidence, your Honor, unless we have the report before us, which is the best evidence.

The COURT. I agree with you. Objection sustained.

By Mr. GESELL:

Q. Can you give us examples of specific accounts, Mr. Smith, where the use of pliofilm in relation to cellophane has increased?

A. Yes, it has increased with the National Tea Company in Chicago. It has increased with H. C. Bohack Company of Brooklyn, the A & P Tea Company, American Stores, Food Fair, Safeway Stores, and Kroger Grocery & Baking Company. I can name more.

8718 Q. That is enough, I think. You stated that pliofilm got its start, you think, in some of these accounts because of the shortage of cellophane. Is there any shortage of cellophane today?

A. There is not.

Q. Have you been able to get that business back?

A. Some of it. Most of it not.

Q. What percentage of the fresh meat business, Mr. Smith, does Dupont cellophane have of the units that are wrapped?

A. That is a difficult thing for us to estimate, Mr. Gesell.

Q. Well, within a range what do you estimate it to be?

A. Last year we estimated it to be somewhere between 70 and 75 per cent., but I am very frank to say that the ups and downs in the meat industry last year insofar as use is concerned make that estimate in our own opinion just a little shakey.

Q. Returning for a moment to the more recent developments in the processed meats, we have traced it through the processing into the fresh, and I want to go back to the processed for a minute. What materials are used today to wrap bacon and other processed meats other than cellophane?

A. Well, there is Saran, Cry-O-Rap, pliofilm, some acetate, polyethylene, and I think that just about covers it.

8719 Q. Is there any greaseproof or glassine or wax paper used for processed meats today?

A. Oh, yes, there is a very large quantity used today. You see, the self-service market which has taken most of this large increase, Mr. Gesell, actually is only a small percentage of the meat business. The estimates that we have made are that these four thousand stores where meat is packaged on a 100 per cent. self-service basis represent about two to two-and-a-half per cent. of the number of stores that sell meat in this country, and that they do probably about 10 per cent. of the meat business. The rest is done through service stores where the same competition prevails as before.

Q. Can you give us an example of your recent experience in competitive developments between these various materials such as greaseproof and pliofilm and so forth, as to processed meats and bacon and items of that kind?

A. Well, the development of pliofilm on the use of processed meats I thought I had just covered, Mr. Gesell, and that is used extensively for wrapping processed meats at the store level.

Q. Can you give us any examples of competition, let us say, with greasproof?

A. Yes. Greaseproof still is used as it was used in 1933 on the same identical brands offered at a lower price through serv-
8720 ice stores, lower price than cellophane, just as it was before, and that competition has continued.

Q. What is Mullinex?

A. Mullinex is—I believe I am right—I am not positive, but I think it is a glassine lined cardboard, patented cardboard carton, which is a completely opaque package and which has had considerable acceptance in the trade, even in self-service stores. You see it in great many self-service stores in the middle west.

Q. Can you give us an example in this meat trade, Mr. Smith, of a technical development of Dupont of a special film which affected favorably Dupont's sales?

A. Yes, I think so. Are you speaking of processed——

Q. Any part of the meat business.

A. This special red film, M. S. A. T. 80, of course, has been the film that we have been able to use in establishing self-service meats, for red meat. On the other hand, we have developed L. S. A. T., which is a film that I think was described here in Court which does not have a great deal of moistureproofness, but which permits, however, the packaging of such items as frankfurters.

I believe I am correct in this and I think it would be substantiated that there had not been up to the time of the development of L. S. A. T. a consumer frankfurter package, because frankfurters are one of the most difficult items to package in that
8721 if they can't get the necessary—if there is too much moistureproofness they will mold almost overnight, and for years we have been trying to do that, and during the war when I was District Manager in Chicago the L. S. A. T. came along experimentally. Our man, I know, A. W. Schaeffer was down in the yards half of the time working on the development of this package, and today that package is probably the single biggest item, even larger than bacon, that goes through self-service stores.

Q. In cellophane?

A. In cellophane, that is correct.

Q. What percentage of the meat business by units wrapped for processed meats do you estimate Dupont cellophane has?

A. Well, because of this development we have been able to improve our position a very great deal in the past ten years, but we have recently estimated that our processed meat business is

roughly in the neighborhood of 25 to 30 per cent. of the total items that are packaged in either ours or other materials.

Q. What did you say it was as to fresh meats?

A. Somewhere between 70 and 75 per cent., but I pointed out, I think, that figure is a little bit on the high side because of the conditions I described before.

Mr. GESELL. Your Honor, we turn to candy now. Would this be an appropriate moment to take our mid-morning recess?

The COURT. Yes. Recess for ten minutes.

8722 By Mr. GESELL:

Q. Turning to candy, Mr. Smith, how much cellophane does Dupont sell for candy?

A. Our sales in 1951 for the candy industry, which includes gum, were 20 million pounds.

Q. How much did you say your sales for meat were?

A. Our sales were approximately 19 million pounds.

Q. What has been the extent of your experience in the sale of cellophane to the candy trade?

A. While I was a salesman in Pittsburgh, I had quite a few candy accounts, among whom were three large ones—the D. L. Clark Company, who make the Clark Bar; Weaver-Costello; Reamer Brothers; and Hardie Brothers. And then there were a group of miscellaneous smaller candy manufacturers.

In 1937, 1938, in that period, I made a very long and intensive study of the candy industry, which culminated in a considerable amount of market research. While I was in Chicago I was personally responsible for about three years for our position with Bunte Brothers, who are a very large mid-western house; E. J. Brach & Sons, who are the largest candy manufacturers in the world; Kraft Foods, who put out a line of caramels, very big caramel manufacturers; and I was also quite familiar with the rest of the candy trade in the middle west, because of

8723 my supervisory activities there.

Q. How does the candy trade break down in terms of major categories comparable to those we have been using in connection with these other end uses?

A. Now, let me see. I think that you can classify it somewhat like this. You have bar goods, which is the biggest volume item in the candy trade, and that is broken down between solid chocolate bars and molded chocolate bars, filled and unfilled, and various other types of miscellaneous bars. Then you have box goods, which can be any number of different types of candy. You have the panned candies, which are the type of candy that have a high polish on the surface, and that word panning comes from the spinning action which they get in large copper kettles. Then

you have the hard candy field. You have the plastic candy field, which is, broadly speaking, plastic or chewey type candies, which includes caramels and kisses and nougats and that sort of thing.

Then there is the gum field, the gum and jelly field. And a very large field that is called count goods. They are goods that are sent out by the count. In other words, a box will contain a 72 count or a 60 count or whatever it might be. And then you have the very wide and very numerous products that fall into the general novelty classification. I think that just about covers it.

Q. What are the principal flexible packaging materials
8724 with which Dupont cellophane competes in the candy field?

A. We compete in the candy field with glassine and wax paper and foil, pliofilm, and polyethylene. I think that is the major competition. Sylvania, of course.

Q. Now let us take glassine as the first of these materials for discussion. What is the principal segment of the candy business where you meet competition with glassine?

A. I would say very definitely in the bar goods field.

Q. And I believe you said that was the largest single volume item in the candy business?

A. That is correct, sir.

By the COURT:

Q. Will you clear up one thing for me? This bar field, in terms of poundage, is there more of that type of candy sold than, say, the box candy that you would buy down at Reynold's?

A. Yes, sir.

The COURT. I just wanted to refresh your recollection to show by examples as you go into this line of testimony. You see, I have your DX-996.

Mr. GESELL. Yes, your Honor.

The COURT. And that illustrates the various other packaging materials.

Mr. GESELL. Your Honor, of course, will recall that those are the converted items only.

8725 The COURT. Oh, there are some in addition to these?

Mr. GESELL. You see, these are only converted items in that exhibit. They are only items where converters have made the package.

The COURT. Yes.

Mr. GESELL. Now in addition candy manufacturers use and buy cellophane direct and do their own packaging.

The COURT. I see.

Mr. GESELL. But those are very representative groupings of different kinds of wraps.

By Mr. GESELL:

Q. Having his Honor's question in mind, Mr. Smith, how do you compare, volumewise, in this bar field, with the other candy categories you are talking about? You say it is the largest. How much larger, or what proportion of the candy trade does that account for?

A. I can't be accurate as to exact percentage, Mr. Gesell, but I believe the last figures I have seen which are avajlable and published by the department of commerce, I think, place the bar goods items in the neighborhood of pretty close to 40% or perhaps a little more of the entire production of the candy industry.

Q. You say that it is there that you meet principally the competition of glassine?

A. Yes.

8726 Q. I would like you to tell us what were some of the obstacles or what are some of the obstacles that cellophane has encountered in competing with glassine?

A. Well, here again the principal obstacle has been price. The candy bar manufacturer is somewhat in the position of the white bread baker, in that what he wants is a billboard type of package, that can be put down on a candy stand such as you see downstairs here and immediately spotted, without having to search the whole stand for it, and he wants to get a significant, distinctive appearance to that particular bar. That was one of the objections that we met when we talked about transparency in the bar field, among others.

Q. In addition to cost, what other factors were there?

A. Well, one of the factors was, of course, that the transmission of light, purely from the standpoint of a visible package, is not good for chocolates, and it produces, that and changes in temperature, produce a graying effect on chocolate, that is called blooming, in the industry. That was another and still remains a negative of a kind.

Q. How do the machine running factors operate as between cellophane and glassine in the candy field?

A. Well, today I would say that we can do as good a job with machine operation as glassine, but certainly not in the early stages.

Not in the early stages.

8727 Q. What was the situation in the early stages?

A. In what respect, sir?

Q. With respect to the relative machine running qualities of the two materials.

A. In the very early days there were not any machines at all to handle cellophane for those items. It was a question of hand wrapping. And an obvious deterrent to such a big house, for

example, as Mars, who produce just a tremendous quantity of bars in this country.

Q. When you started to sell cellophane for these bar goods, what material was used to wrap candy bars?

A. Well, there were two materials, and they are still used widely. The principal one was glassine, and there was a very substantial amount of foil used also.

Q. Were you able to get any bar business?

A. Yes. Yes, we were. We had a very substantial amount of bar business at one time. We had such bars as, I think it was, Oh! Henry? I think that is the Williamson Candy Company produces them. Baby Ruth. Butterfingers, I believe, was in. Love Nest, I believe, was in. Later on we had Mounds, which is made by the Peter-Paul Company. We had a bar called the Heath bar, which is one of the best known bars in the United States.

Q. In what material had those leading bars been wrapped?

A. They had been wrapped in glassine.

8728 Q. Have you been able to keep this business?

A. No, we have not been. We have lost all of the business on those items that I have just spoken of.

Q. All of those accounts?

A. That is correct, sir?

Q. To what material have you lost them?

A. We have lost that back to glassine.

Q. Will you tell us why, after you were able to get the business from these leading bar manufacturers, you lost it?

A. Yes. We lost the business primarily because while it became evident,—it was evident, rather,—to them at the time the change was made that a package change was desirable because of conditions in the industry, when they added up the situation at the end of the year and a half or two years their profit position was not as good as it had been when they were using glassine; so they went back to glassine. And up to this point,—up to this point, at any rate,—we have not been successful in recapturing the business on those particular items.

Q. Are you still making any effort to sell to those particular items and other bar items?

A. Yes, indeed, we are.

Q. What kind of effort are you making?

8729 A. Well, we are doing it in two ways. Inasmuch as we have not, at least up to this point, been successful in wrapping the bar individually we have made considerable progress in developing what we call take-home bar packages, which is four or five bars wrapped in a tray priced at, we will say, 29 cents, something of that kind, and sold from food stores. We are

still continuing, however, to try to get that individual bar business, because we still think that we have an opportunity to do it.

Q. Do you have any bar business today, or have you lost it all?

A. No. No, we have what I consider to be a very nice bar business.

Q. I am talking about bar business apart from this packaging of groups of bars. I am talking about business in the individual wrap. You have some of that, you say?

A. Yes, we do. We have a very nice business in that respect, which I should certainly hate to lose. We have a very nice number that is nationally distributed, made by the Elmer Candy Company, of New Orleans. I think they call it Golden Nougat. We have an account in Kansas City that comes to my mind, the Donaldson Chocolate Company, that just on one item alone uses a very substantial amount of cellophane.

Q. In those cases where you have the business, are manufacturers of glassine calling on those accounts?

A. Yes, they are. As a matter of fact, we replaced
8730 the glassine on the bars of the Donaldson Chocolate Company not too long ago with printed cellophane, at a higher cost.

Q. Now you mentioned the Heath bar. What is the Heath bar?

A. The Heath bar was somewhat of a phenomenon in this country, in that at the time most bars were weighing a quarter of a pound, 4 ounces, they were selling a bar for about 2½ ounces for the same price. It is a bar put out by Heath & Sons, down in lower Illinois somewhere, and I can't think of the town at the moment.

Q. Do you have that business today?

A. No, we don't have that business today. We held onto that business right up until, I think, some time around the beginning of 1941, at which time they had built up quite a nice volume, but with the rising cost of ingredients they felt that they were going to gamble with a cheaper wrap. And so far they have gambled successfully because we have not been able to recover it.

Q. Can you give us any other examples of shift of business back and forth as between glassine and cellophane in this candy field?

A. You are speaking of the bar business, Mr. Gesell?

Q. Yes; or any other place where you meet glassine competition as to candy.

A. The bar business is the principal place where we
8731 meet glassine competition, Mr. Gessell. It is such an overwhelming element of its use that at the moment I can't recall any specific thing that I would care to put into the record.

Q. Other than in bars?

A. That's right. And in an important way.

Q. To what extent have converters participated in this bar business? Is this mostly a direct sale item or mostly a converted item?

A. No, it is mostly a converted item. Although we have some bar business, particularly in summer bars, which take over when the chocolate field is finished in the early spring months, that are in unprinted film. But most of them are in printed film.

Q. Do you know of any large accounts, bar accounts, that have always used glassine, and that have never used cellophane.

A. Yes, I do.

Q. Can you name one or two of those for us?

A. Yes. Mars, which I think is the second largest bar house in the United States,—Mars, Incorporated, of Chicago,—have never used any cellophane on their bars. There is Robert Johnson Candy Company in Chicago. I think they put out the Powerhouse bar.

By the COURT:

Q. Who owns that Mars Company?

A. I do not know right at the moment. I think that
8732 with the death of Mrs. Mars there have been some reorganizations in there, your Honor.

By Mr. GESELL:

Q. What material do they use?

A. They use printed glassine.

Q. You say that you compete with foil in the candy trade?

A. Yes.

Q. In what areas of the candy business does that foil competition occur?

A. Well, that occurred in the field of bars, notably the Hershey bar, which has been the traditional chocolate bar in this country for as long as I can remember. Bunte Brothers had a very good bar line in foil. It still is in foil. In the Easter egg field, which is a tremendous field for the use of foil, Easter being one of the big candy production seasons, we have met that competition to some extent, but we certainly have not met it completely.

In the five-cent items which you will see down on the candy stand down here, there is a lot of foil used, such as on lifesavers, for example, or on the charms five cent package, and that sort of thing. I think those are the major areas that we sell.

Q. How about mints?

A. Oh, I did forget mints. Yes. We have had a little
8733 business on mints, but not much. But the penny mint and the five cent mint are very, very big items in production

with some large houses. They have been in foil as long as I can remember, and we have some business, but we still have not been able to overcome the disadvantages.

Q. What are some of the obstacles that cellophane has encountered in the candy trade in competing with foil?

A. One of the large disadvantages, the large hurdles, that we had was what they refer to as the tradition of foil. You will find among candy manufacturers many who will think in terms of wrapping an Easter egg in foil and in nothing else, unless a better package can come along, because they think it is the traditional thing to do. The Hershey chocolate bar is a good example of that. I don't know exactly why Hershey at the moment is using glassine, but for as many years as I can recall, prior to the war, the tradition of foil as associated with a chocolate bar was the strongest deterrent that we had to face in trying to get cellophane on that package.

Then in the bar goods business there is also the fact that there is no light transmission, plus the fact that in certain types of machines foil runs very well; it has dead fold characteristics; and that same disadvantage as cellophane is particularly true in
8734 the wrapping of mints, which pass through this machine, and on some of them a type of brush simply brushes this foil underneath and in place, and the dead fold characteristics hold it there. We have not been able to overcome that to any marked degree.

Q. What happens in the case of cellophane?

A. Well, in the case of cellophane, being a springy material, we have to heat-seal it on the bottom of the mint. And in doing so, particularly on a round mint, we tend to get a dog-eared type of package, and we have not been able to produce the speed as yet on certain wrapping machines equal to the speed of foil. So you have a production problem.

Q. Are there any questions relative to preservation qualities present as between cellophane and foil?

A. Yes, on chocolate items, there are. This transmission of light that I mentioned to you before is the chief one that I can think of. I can't recall any others.

Q. Foil is more expensive than cellophane, is it not?

A. Yes, sir.

Q. Have you been able to take business from foil on a price basis?

A. In some cases, yes, we have. We have displaced, for example, some of the Easter egg business that formerly was enjoyed, and we have some of—I know before I left Pittsburgh I had some of Reamer Brothers' business and some of Harie Brothers' business on eggs; but it was an entirely different

approach to the packaging problem; there were other
8735 reasons why they found out that it was desirable to do it.

Q. Do other materials besides cellophane seek to get the business that foil has in the candy trade?

A. I don't see any reason why they do not.

Q. Well, that is not what I asked you. Do they or don't they?

A. I actually don't know.

Q. Can you give us, from your——

A. With this exception,—with glassine, obviously, yes, in the bar field. But on Easter eggs, I don't know. I was thinking of eggs in this.

8736 Q. Can you give us examples from your experience of competition with foil in the candy trade, places where you have succeeded in getting foil business and where foil has succeeded in getting business from you on certain items?

A. Yes. I am thinking of the mint business now. We have had some mint business with Reamer in Pittsburgh; we have had some with E. J. Brach in Chicago. There has been a shift back and forth in that respect. I think we have lost Reamer Brothers' business and I think it is back in foil again now. That has been true of several producers of mints, Mr. Gesell.

Q. Have you any examples other than the mint field where large accounts have used foil?

A. Yes.

Q. And never used cellophane or vice versa?

A. In the Easter egg field I mentioned to you before, the development of printed wraps on foil gave us a considerable amount of business from Hardy Brothers in Pittsburgh. I know we got some from E. J. Brach and several of the other bulk houses out in Chicago. I can't say exactly to what degree we penetrated the foil in that respect, but we have some position in there today, but we have not displaced foil, nor have they gotten the business back completely.

Q. You mentioned also that you competed in the candy trade with wax paper?

8737 A. Yes, sir, we do.

Q. What sort of candy items do you meet wax paper competition on?

A. The principal items that come to my mind at the moment are in the chewy plastic type field such as kisses or caramels or nougats or that type of candy. Then there is another very strong field in what are called counter goods in which most of the penny goods appear, and there is a tremendous amount of wax paper used on penny goods as for children.

Q. What have been the principal obstacles of cellophane in competing with wax paper in this candy field?

A. It seems to me in every case we almost have to start off with cost, because that was present everywhere. In the kiss field it was a tremendous original disadvantage, too, insofar as wrapping kisses is concerned or in any of these other things. The first deterrant was the fact that there was no equipment available. There was not a single machine, for example, for the wrapping of kisses that could handle cellophane in my territory in 1934. They came along later, but there wasn't any then. It was just ridiculous for me to start talking to these people about hand-wrapping kisses when they were wrapping them by machine on wax. When we did convert machines we ran into the cost problem, because there you are dealing with a very, very low-priced item. One of the cheapest items in the candy field. We were able to get kiss business
8738 in Pittsburgh before I left there, and I think there was something like between 46 and 50 what they called model K kiss wrapping machines. D. L. Clark & Company, I know, had 28 in line, and in the year of 1935 I think we had them all going. My candy business increased that year very, very substantially.

On the other hand, the next year most of them had turned back to wax simply because the market for kisses would not stand the increased cost.

Periodically between then and now we have gotten some kiss business and we have lost it. The same thing is true out in E. J. Brach. They wrapped some kisses, that type of candy, in wax, some in cellophane, depending on the fluctuations of the market. I think you can say practically every general line house in the United States, and most of them are in Chicago, had the same experience in that respect.

Q. In the hard candy field what materials do you compete with?

A. In the hard candy field we compete with pliofilm, with polyethylene, with some foil, with some glassine. I think that is the major area. Mr. Gesell.

Q. Now, over this period of years what has been the trend of your candy sales volume-wise? You told us that it was substantial today. What has been the trend over the years?

8739 A. We sold in 1933 at the time I started a little over four million pounds to the candy industry, and last year our sales were a few thousand pounds lacking twenty million.

Q. What percentage of the candy units wrapped do you estimate are wrapped in Dupont cellophane?

A. We estimate within the range of 25 to 35 per cent.

Q. To what factors do you attribute this enormous growth in Dupont's candy business?

A. We attribute that almost one hundred per cent to the development of the food store market for candy.

Q. When did that development begin?

A. That development began about 1938.

Q. What, if anything, did Dupont have to do with promoting that business?

A. Well, I like to feel that we had considerable to do with it, and I think I would be willing to rest that decision on what the candy industry itself would say about it. I am inclined to feel if you ask them that they would agree that we had a great deal to do with it.

Q. Has food store sale of candy grown during the years?

A. It has grown very, very substantially.

Q. How important is food store sale of candy today in terms of the total candy market?

A. Well, let me put it this way: When I looked into the food store market in 1938 the sales to the food store market were
8740 so small there was no record of them. There was no record of them whatsoever.

Q. What do they account for today in the business?

A. Today they account, according to the National Confectioners' Association's latest published figures, which I think would be revealed possibly in the Census, although I am not sure, for approximately 20 per cent. of the total sales of the totals sales of the candy industry today through the food stores.

Q. You say you like to think that Dupont had a lot to do with that development. Will you tell us what Dupont did?

A. Yes, sir. Let me collect my though here a minute. I have to go back to 1938.

In 1938 our management, as I recall it, looked over our candy business and said it looks to us like we are not going any further for a long time, and the reason was this: That we had developed by that time practically every kind of package we could develop machines to handle, all kinds of products, and we were just operating then within the framework of the candy industry, and we are not going to be any better than the distribution policies of the candy industry in the sale of candy; and we had two alternatives: One was we could just keep on chipping away at these other materials and try to get this item in or that item in, or we could, if possible—and this is what we tried to do—come up with an entirely new direction that would change some of the struc-
8741 tures in the candy industry to give us an opportunity to better compete.

Now, that took the form of a tremendous amount of research into new outlets for candy. Even in 1938 there were over one million outlets who sold candy. After analyzing this thing very carefully we decided that the food store was the best possible outlet for candy on this simple premise: That if there were already one million outlets for candy it was quite obvious that candy could

be sold anywhere if candy could be exposed to people, and with people going, particularly women, going into the food store several times a week as opposed to the number of times they went to the department store or the drug store or the regular candy store or other outlets, our basic reasoning was if the candy industry can get substantially into the food store it is a very great opportunity to increase the consumption of candy. That was the basis on which we started out and here is what we found out:

We found out that most food stores in this country did not carry candy. They thought it belonged in the candy store. We found out, for example, that when they thought of profit in candy they were thinking in those days of the price competition on bars, which was rather severe. We found out, for example, that very few people had ever approached them on the selling of candy, be-
cause the practice of the candy industry was to go through
8742 the candy and tobacco jobber who did not consider that
the grocery store was his outlet.

Now, we satisfied ourselves through a study of this situation in 33 cities that we had enough facts regarding distribution to say something to the candy industry. But before we could do that we had to set up a substantial number of market tests to determine, for example, whether candy would sell or not, at what prices it would sell, when it would sell, when it would not, and under what display conditions and that sort of thing, and it was interesting to us to find that the price structure of the candy industry, unless it was changed, would not sell in the food store. For example, the food store sales we found out through long testing would be at their peak at a 19-cent price, and the candy industry produced no item whatsoever that they could retail at that price. We found out they could go up to 29 cents. They could not go beyond that. So that eliminated the higher price boxed goods. There was a big gap in the price line.

Well, I want to make a long story short, because I could talk about this a long time.

To make that story short, we took those facts and we went to the candy industry and we said, "Here, these are our findings. If they appeal to you as factual and you do your own checking, and if you think that is something worth going after, let us work
with you in designing a line that is specially designed for
8743 food stores, what we would call home consumption units, so
Mrs. Jones can walk down and get a loaf of bread and pound of hamburger and pick up a 19-cent bag of hard candy, something she could not do up to that time."

The candy industry accepted that, I am very glad to say, and at the time the war started at the end of 1941 our candy business was already beginning to reflect the adoption of entirely new

lines of candy that in some cases had never been packaged before, and that was the basis upon which we continued to build, particularly with the expansion of self-service, continued to build our candy business to what it is today.

Q. Did this promotion result in all the food store candy being sold in cellophane?

A. No, I should say not. It expanded the market of candy, but when we said to the candy manufacturer, as I remember saying to the Executive Vice-President of E. J. Brach & Sons, and worked out lines with him which he could put into the food store, we will take this line, that line, and the other line and we will price it this way for the retailer, many of those lines went into boxes, many of those lines went into window boxes, some without windows. The glassine people did not change their bars when they put them into the food store, but they went right along with it. The foil people had foil packages in there also priced at that same price. So all that did for us, we feel—and we felt that we had no choice in the matter at the time—was to give
8744 us an opportunity to get out of this closed-up pattern of competition that we were in prior to 1938.

As a matter of fact, during the last year, during the last year the acetate people took over one million pounds of business away from us in cellophane bags because they had the simple and good argument that it stacks better in a window box than a bag, won't slide off the shelf, therefore, of course, the store operation is less. They had sold that idea to many of the chains, and I don't know of a single general line house in the country who have not today a line of acetate window boxes competing with cellophane bags.

Q. By the way, you have several times told us, Mr. Smith, that after one of these promotions the user went along with the marketing idea but did not put his material in cellophane. Do you have a term that you use for that kind of a user?

A. Well, they thought cellophane was nice twenty-five years ago and they think it is just fine today, and we call them an "enthusiastic non-user."

Q. Now I want to turn to crackers and biscuits. How much cellophane do you sell for crackers and biscuits?

A. Crackers and biscuits in 1951 we sold pretty close 17 million pounds.

Q. 17 million pounds for crackers and biscuits?

A. Yes.

8745 Q. And that compares with about 19, you said, for meat, and how much for candy?

A. About 20 for candy, lacking a few thousand pounds.

Q. What has been the nature of your experience, Mr. Smith, in the sale of cellophane for crackers and biscuits?

A. I had several cracker accounts in Pittsburgh in my salesman days. There was a large plant there of National Biscuit which did their own buying at the time. There was a large plant of Colonial Biscuit which was then a division and is now of United Biscuit Company. In Chicago I was responsible for calling on the headquarters of the United Biscuit Company which operate quite a substantial chain of bakeries throughout the country. I am acquainted generally with the operations of the cracker and biscuit industry throughout the middle west, because of my supervisory activities, and I have done some special studies on the cracker and biscuit industry, including one or two that were particularly aimed at the two largest units in the business.

Q. Well, now, how do we break this field of use down?

A. Well, there are two main divisions in this field which for practical purposes you can call sponge goods and sweet goods. Sponge goods are the saltine flakey type of cracker, the soda cracker type, and they are made in a great many different varieties, but essentially they are a raised cracker. They are made from sponge dough.

8746 Then there is the sweet goods which, as the name implies, are sweet crackers or biscuits, and they cover a very wide variety of types.

Q. Taking up sweet goods first, what other flexible packaging materials are used to package sweet goods?

A. Well, we compete with glassine, which is a very big—waxed glassine, a very big user, wax paper, sulphite paper—when I say wax paper, both printed and unprinted; with foil, with some pliofilm which is beginning to come in, with some Saran, which has just recently been used by one of the biggest companies in the country, and there has been some polyethylene used also, however very little of that up to this point.

Q. How are these materials used? Are they in bag form or in what form are they used for sweet goods in the cracker and biscuit field?

A. You will find the biggest use for glassine either as an overwrap or as a liner, as a waxed liner.

Q. What do you mean by an overwrap?

A. An overwrap is a wrapping of the material by machine over the carton in order to give it protection or to provide merchandising advantages.

The COURT. I think we will take our recess now until 2 o'clock.

(At this point a recess was taken until 2 o'clock, p. m., the same day.)

8747 2:00 O'CLOCK P. M., THE SAME DAY.

Present: As before noted:

R. R. SMITH, resuming.

By Mr. GESELL:

Q. We were talking about the sweet goods department of crackers and biscuits, Mr. Smith, on adjournment, and you had, I believe, been discussing some of the other materials that compete in the sweet goods area of this business, and said that they were used for liners and overwraps, bags, and so forth. To be sure that the record is clear, can you give us a few examples of what sweet goods are,—well known sweet goods.

A. Yes, I think so. Such a common item, for example, as gingersnaps, is in the sweet goods classification. For a good many years, and still, the National Biscuit Company put out an item called vanilla wafers, which has been packaged almost 45 years, I guess. The various chocolate covered types of cookies that you see, with marshmallow topping and chocolate covering, are in what they call the sweet goods classification. That differs from sponge goods, in that sponge goods are the soda crackers, items such as Ritz crackers, and there is a wide category in that field, but basically they are made from sponge dough and raised, just like bread is raised.

8748 Q. That would be like saltines?

A. That's right.

Q. And Pilot biscuits, and things of that sort?

A. That's correct.

Q. Will you tell us what obstacles Dupont cellophane encountered in efforts to sell for use on sweet goods? What have been some of the quality obstacles, cost obstacles, or other obstacles?

A. Well, I think that you can divide the sweet goods field, particularly in the early days, into two classes; that is, the goods that were packaged and the goods that were sold in bulk. The cracker and biscuit industry, Mr. Gesell, was one of the first packagers of merchandise in this country. They have been packaging for a great many years. And as early as 1931, I believe that 60%, 65%, if I recall the figure, of the sponge goods, that is, the saltine and the soda cracker type, already were packaged in cartons, with glassine liners, and about 35% of the sweet goods were packaged in the same way. So we entered the field therefore with competition from established packages, and we were both competing, both glassine and wax paper and sulfite and ourselves, to get the bulk goods that were unpackaged into our respective materials.

Now we run into cost problems, obviously, on the overwarps and liners of those items that were already packaged. In the early days again, the same machine problem came, and

8749 the first applications that I know of in the sweet goods field

were the overwrapping of such very expensive items as what the National Biscuit Company used to call their Nobility assortment, way back in 1934 and 1935. That was a high priced item, that sold for maybe 79 cents.

That is just about all the business that we could get in those days on that type of item.

Now in the bulk field we ran immediately into the tradition of bulk selling, that defied any attempts at packaging on our part for a good many years. By bulk selling, I mean the practice which was prevalent, particularly in the sweet goods field, of sending out to stores bulk units of from five to ten pounds of a certain kind of sweet goods. That was the cheapest way that the biscuit companies could get those kind of goods to the store. Then they put them in caddies, and you probably remember seeing them lined up in a rack, maybe 15 or 20 or 30 assortments, and they were bulk. Well, we ran into the tradition of bulk, in that they said, we can't stand the cost of breaking up the 10-pound boxes, going through the operation of filling ten bags, devising special shipping containers to send it out to the store, and still sell at the same price; we are in competition with other manufacturers, and we would not be with that kind of operation.

8750 The second thing, of course, was the durability of cellophane in the early days, because the breakage problem in bags, before we developed a special bag film, was, frankly, terrific, and it was well known to the biscuit industry that there was a breakage problem, and that was something else that they didn't care to risk.

So our sweet goods promotion up until 1938 consisted of competing against the established packages of sweet goods that were in cartons with the glassine liner or a wax overwrap, and approaching each problem on the basis that I have described before, on an individual basis, and attacking it from that angle. We made some progress.

8751 Q. Well, have these various obstacles continued up until the present time or have most of them been eliminated over the years?

A. Well, so far as the breakage problem and the machine problem is concerned, that has largely been eliminated through the development of equipment; but we still have the cost problem to face and constantly have to face it wherever we go in terms of replacing glassine or wax paper on those items.

Q. Can you give us some specific examples from your experience of how these various factors actually operated in particular situations, showing shifts in use of cellophane on particular items?

A. Yes, I think I can. The Merchants Biscuit Company, a member of the United group in Denver, Colorado, and also in

Omaha, eliminated cellophane after we were successful in applying it due to cost. We have gotten some of that business back again. Glassine has gotten some of it back again and sulphite paper by a better waxing and better printed job has got some of it back again. So there has been in those accounts a shifting constantly between those items on cartons particularly. That is fairly typical.

I think seven or eight plants about two years ago of the United Biscuit group and the Ontario Biscuit Company of—I think
8752 they are in Buffalo, which is one I am thinking of right now—did the same thing. A package change was decided upon for some market factor that I can't describe to you, but they went to a cheaper package after having been in cellophane. That thing reverts back and forth from time to time, and we still have that same kind of competitive problem.

Q. In this field did Dupont do any special promotion work?

A. In the field of sweet goods you are speaking of?

Q. Yes.

A. Yes, we did.

Q. Can you tell us briefly what you did in that field to develop business?

A. Yes. I want to point out, though, Mr. Gesell, that in the development of this carton overwrap and liner business we had approximately in 1938 about 2 million pounds of business. Now, all of that—practically all of that, almost one hundred per cent. of it actually was business that we had taken away in competition with wax paper or glassine as a protective overwrap, or in some cases a liner of a carton.

Up to that time there was only one company in the United States that I know of that was using cellophane at all in bag form, and that was the Merchants Biscuit Company of Denver. About that time they decided that they would experiment with cellophane and they all experimented with cellophane, and actually they had
8753 a very disastrous experience because, frankly, the item was not succeeding, and we recognized that unless something could be changed in their methods of merchandising that probably we would not succeed and would have to compete as we had for many years along the same identical line of replacing glassine, being replaced in turn by wax paper, and that sort of progress which we felt was very slow.

I was delegated or the group for which I had responsibility was delegated to look into this situation. I think it was some time during 1938 when we started that work.

We made a very careful study of this whole distribution problem. Our men traveled with salesmen of the cracker and biscuit man, and he distributes differently. He does not go through a

wholesaler. He bakes and he distributes directly from the bakery to the store. It is about 95 per cent. of his distribution. So we found out a lot of things, and in order to tell you why we arrived at the basis for a change in merchandising I would like to explain this:

If you will let your mind go back to the service store, the clerk service store as it was about 1938 when there was very little self-service, you will remember that they usually had four or maybe three counters and goods were stacked up against the wall, and the counter space was practically the only available display space; and everybody was trying to get on that counter. The
8754 cracker and biscuit industry was taking out five or six units and saying to the grocer, "This is our new line." He says, "All right, I will take one item of this and one item of that."

Well, what happened was we found that that was getting up on the counter, and three days later somebody else would come along who wanted the space and say to the grocer, "This fellow has been here long enough. Why don't you give me a break?"

So the result was that it got pushed off the counter, got pushed back on the shelf. Therefore an improvement in packaging had no possible chance to do a job. So therefore there were no results from it. Actually there was a loss.

What we found out through experiment was this: That the way in which we thought crackers and biscuits should be merchandised was for the industry to sell a complete department of goods, just like they used to sell in bulk. They had 25 to 30 varieties. We promoted at that time the sale of a complete cooky department that would be purchased as a unit, not as a dozen of this, but a unit department that may sell anywhere from 15 to 18 to 25 dollars, and that way it got in the store as a permanent fixture.

Now, that took hold, and that took hold and was very successful until self-service came along, and then it was no longer neces-
sary because there were particular departments for that
8755 class of goods. But that was the only way in which we could keep the cellophane bag business from going to pieces.

Q. About what perecntage do you estimate of the sweet goods wrapped are wrapped in Dupont cellophane?

A. Considering the total production of sweet goods we estimate between 40 and 45 per cent.

Q. Are any of these other materials using the same display and promotional methods that you have described?

A. Well, they are no longer necessary now, Mr. Gesell, because since 1938 there has been a complete revolution in food retailing, and most food today is sold in the self-service stores of one kind or another, so that today a package automatically goes on display,

you might say; whereas in those days it did not. Devices and methods had to be employed for getting it there.

Q. Have there been any new developments in this field on the part of one of the manufacturers of another packaging material which has strengthened the competition?

A. Oh, yes, yes. There have been many different changes. For example, when process printing became possible on wax paper the carton companies and the wax paper people naturally promoted that, because the use of cartons in the biscuit industry is a much better production operation than bags. They all have to be filled by hand. So they were able to take a considerable amount of business from sweet goods that were in bags, put them
8756 back into cartons, because of the production feasibility of that, plus the much better printing that showed the product almost as if it were in direct color photography.

Q. You mean the printing on the overwrap?

A. That is correct.

Q. Now turning to sponge goods which you said include saltines and crackers of that kind, what are the materials with which you compete there?

A. We compete again with glassine as a liner, with wax paper both as a liner and an overwrap, with printed sulphite paper as part of the overwrap. I think that is just about it.

8757 Q. What are some of the obstacles you are encountering there in selling cellophane?

A. We had the same identical problems there, principally of cost, and even more so in the early days, Mr. Gesell, because the competition in the sale of sponge goods, which are the biggest item in the cracker and biscuit field, by far and way, was much more intense than on sweet goods. Competition between manufacturers.

Q. You mean manufacturers of the goods wrapped?

A. That is correct. The only way we got started in that field was in this respect. During the 30's it was the practice of all cracker and biscuit manufacturers to put out two lines of sponge goods. One was what they called a price line and the other was what they called their quality line. One sold for about four to six cents a pound higher than the other for the same weight. Now they didn't really want to sell the cheap line, because there was no profit in it, but we were able to get some business by inducing an improvement in packaging in the quality line that they wanted to sell. That was the way we were able to break into the sponge goods carton overwrap field.

Q. Can you give us some examples of competition and shifts of business between these materials that have taken place there?

A. Let me think a moment. Yes, I think so. We had
8758 quite some success with that idea, Mr. Gesell, but, like everything else, when something happens on the market, people think of the possibility of changing packages. We lost, as I remember now,—the Keebler-Weyl Biscuit Company, which is a division of United Biscuit, eliminated, not too long ago, as a matter of fact, the overwrap of cellophane on saltines.

Q. And went to what?

A. They went back to wax. The Union Biscuit Company, down in St. Louis, was another who did the same thing. They removed the cellophane overwrap and they overwrapped this time with printed wax, with the better type of printing. Four or five plants of the United Baking Company, while I was in Chicago, did the same thing. I think Quality Biscuit, of Milwaukee, was one of them. Merchants, of Denver, also did the same thing. I am sure if I could check the records there could be more, but those are the ones that occur to me at the moment as being representative of that sort of competition.

Q. What is meant by the term fractional packaging, Mr. Smith, in this biscuit and cracker field?

A. Fractional packaging is just this. It means the breaking up of a carton of, we will say, a one-pound of saltines, and instead of selling it as a complete unit, inside that carton each one-quarter of that pound is wrapped, so we have four individual packettes,
and they are sold in the regular carton just as saltines were
8759 sold before, but the housewife has to open only a quarter of a pound at a time. And that, incidentally, is, I am told by cracker people, considered to be the most revolutionary thing that has taken place in the cracker and biscuit industry in twenty years.

Q. Did Dupont have anything to do with promoting fractional packaging?

A. Now I am not going to say that we did, Mr. Gesell. In this respect: It is difficult to tell why people make up their minds sometimes; but I can only tell you that we have been trying to get this idea across in one way or another for twenty years, without success, because it always seemed to us to be a fundamentally good economic idea.

Q. When were you first successful in selling cellophane for fractional packaging?

A. The first company that started it was in 1947, I believe, Schulze-Burch, in Chicago.

Q. Can you tell us what happened once that Schulze-Burch undertook that kind of packaging?

A. According to some studies that I have seen, and reports that I have seen, they went from about fourth position to a very much improved one—I don't know whether it was first or second—in the

Chicago market. But they have been extremely successful in that market.

Q. Will you tell us what the course of the development has been since that time and what competitive factors
8760 have been encountered in the market?

A. This idea we believe is sound, and it made an impact on the market. Now we have naturally brought it to the attention of other cracker and biscuit manufacturers, although not necessarily, because the item itself made an important impact. It has been successful to this extent, up to this moment, that about 26, the last count I saw, about 26 cracker and biscuit bakers now have such an item in the market in saltines. In some cases it has spread to other items, like graham crackers. And how far it may go beyond that, of course, we have no idea. Now some of these people use wax and some of them use cellophane. The idea was good, but some preferred a less expensive material, that would give what they feel to be adequate protection. There is no visibility employed here at all, you know.

Q. Are other materials besides cellophane and wax paper used for fractional packaging?

A. Well, yes; wax glassine is a very big item in that. I think the largest manufacturer in the country uses wax glassine on his inner packettes.

Q. What extent does Dupont have of the total fractional packaging volume? Have you any idea?

A. I actually don't know, Mr. Gesell, and I wouldn't want to guess. The total is so completely tremendous. We sell about two million pounds for that purpose.

8761 Q. Would you have more or less than glassine and wax paper combined?

A. Oh, we have only a percentage of wax paper and glassine combined, because at least two c...erns that I know of could use and probably do use, if they are national in their distribution now, and I think they are, probably in the neighborhood of fifteen million pounds, just from two concerns, on that one item. That is the volume that is represented in that particular item. So when I say we have a small percentage, I think I am making a conservative estimate.

Q. Have there been examples of customers who started to use cellophane for this purpose and then shifted to other materials?

A. Yes, there have.

Q. Can you give us an example or two of that kind?

A. Yes; I believe some of—one or two of the—again, of the United Biscuit Company plants, that started in cellophane around 1948, felt what they thought was the pinch of shortage, and went to wax glassine for that purpose. However, we have not been

able to get them back, and there is no shortage now. But what happened about two months ago, or rather two weeks ago, was, I think more impressive as indicative of the kind of competition in this field; and what I meant when I said so many times that things happen when something has an impact on the mar-
8762 ket. One of the very big producers in this country reduced the price—well, as a matter of fact, it was National Biscuit Company, because it was in the public press—reduced the price of their fractionally packaged saltines. I think they call it Premium crackers. By four cents a pound.

The day after that hit the press, the Carr Consolidated Biscuit Company called in to cancel their orders for cellophane through their New England bakeries. The Crescent Cracker & Macaroni Company, out in Davenport, Iowa, quit using cellophane. I don't know exactly, frankly, what is going to happen in that field, but it is quite certainly a problem that we are going to have to face if we want to protect this business that has been built up.

Q. Do you have an estimate as to what percentage of the units in the cracker and biscuit trade that are wrapped are wrapped in cellophane made by Dupont?

A. We estimate that in 1951 approximately 25 to 30%, and the rest of the packaging production was in other materials.

Q. And what again did you say was the volume of that business to Dupont in terms of pounds?

A. Pretty close to 17 million pounds.

Q. Now, Mr. Smith, I want to turn to frozen foods. How much cellophane does Dupont sell for frozen foods?

A. We sold in 1951 5,827,000 pounds.

Q. What has been the extent of your experience with
8763 the frozen food development?

A. As a salesman, I had none, because there were no frozen food accounts; but as a district manager, in Chicago, I was familiar with the poultry packing operations of the Big-Four meat packers. I was familiar with the operations of Libby, McNeil & Libby, who are large processers of frozen foods. I have been acquainted with the various important accounts throughout the country, such as Pict-sweet Foods, in Washington, and Delaney, down in Maryland, in my capacity as part of the sales management here.

Q. Can you tell us what other flexible packaging materials if any are sold to the frozen food trade?

A. Yes. I think you could almost name them all.

Q. What are the principal competitive materials then?

A. The principal competitive materials are wax paper, wax glassine, polyethylene, pliafilm, Cry-*o*-Vac. I think you would call that the principal competition.

Q. What about parchment?

A. Yes, parchment is important competition in frozen fish, particularly in that end of the business.

Q. Will you trace for us briefly what the growth and development of Dupont's sales in this frozen food field have been, Mr. Smith?

A. Let me see if I can put this in categorical order. At
8764 one time there was, for all practical purposes only one frozen food producer in the country, who produced consumer units, and that was what is today the Birdseye Snyder Division of the General Foods Corporation. That was the Birdseye brands. They were the only producers, and we had 100% of their business, which they had taken from wax paper. From 1931 until the start of World War II, there was a considerable growth in that business, with such people as Honor Brand and Delaney coming into the picture. But the really phenomenal growth of the industry did not occur until World War II started, and if you would care to check the production figures of the industry as opposed to 1931,—and I don't have them at the tip of my tongue,— you would see an almost fantastic development of frozen foods in this country. It has come to be one of the major processed foods in the United States.

Q. What obstacles did cellophane encounter in seeking to sell for frozen food uses?

A. As I said to you, Mr. Gesell, we had the business of General Foods 100%, it was the only account that we had, as a matter of fact; but as this business developed, and new methods of production came into the picture, the avenue was opened up for high speed production methods such as those employed by the Food Machinery Corporation, straight line production methods, which included the unfolding of the carton, the filling and the
8765 wrapping of the material, in the straight line method, and we have never been able to break into that field in any substantial way.

8766 Q. What material has that field?

A. Wax paper has that field almost one hundred per cent. in the overwrap business, and that is the biggest end of the field.

Q. And why haven't you been able to break into it?

A. We have not been able to break into it for two reasons: One was that we did not have a package that would lend itself to the high speed production methods that were employed in the interest of good production. The second was that the protection afforded by wax paper was in the opinion of the frozen food people completely adequate for their purpose, and there again it was purely a matter of cost.

Q. Can you tell us whether there has been any recent competitive developments in this field which have sharpened the competition between cellophane and wax paper?

A. Yes, sir, I think so. I think I can clarify that by just a slight precedent. It became very evident to us about 1942 that unless we could develop a greatly improved merchandising package, for example, for frozen fruits and vegetables that aside from our business with General Foods, that as the business grew we were not going to grow with it. So the converters of cellophane produced and sold in very sizeable quantities from 1944 on what they call a multi-color processed opaque cellophane overwrap, and I think you may have seen them. They are printed
8767 from direct color photography, and they are a very, very beautiful package, and it made some very substantial progress in the industry. Dulany, Libby, McNeill & Libby, Cascade Frozen Foods, California Consumers Co-op, Pictsweet, and a big one in New York which I can't think of the name right now—there was quite a long list that used that package and were very successful with it.

However, there have been some very great improvements in wax paper, particularly with what they call the hard wax type of package, and a tremendous improvement in the printability of wax paper. So that I think it was the Marathon Corporation, among others, who developed the sheet that they call Titon, and at three or four feet away, unless you had a very careful eye, you were unable to distinguish, and particularly in a frozen food case where there was a little frost there, between that kind of printing and the printing that you could get on cellophane. It was, I think—and I want to be sure about this now—I think only about 60 per cent. of the cost of cellophane. Well, we have lost business in very great quantities and it has given us a lot of concern.

Just a couple of weeks ago I was looking over a list of concerns whose business had dropped, because of my interest in this problem. I think there were five that I just happened to catch my eye at the time that were big users. One was Dulany. One was Pict-
sweet; one was the California Consumers Co-op and the
8768 other was Libby, McNeill & Libby. The point I want to make is this: That they started in 1944 to use this improved cellophane wrap. I think we sold something like 22,000 pounds that year. By 1949 just the sale of those four accounts had reached over a half-million pounds; but from 1949 to the end of last year because of the competition of this improved wax paper they had dropped to approximately 100.

Q. Now, briefly I would like to cover competition with some of these other materials in this frozen food field. I mentioned parchment and you said that it was used particularly in connection with

frozen fish. What are the advantages of parchment to the buyer from cellophane for this use?

A. Well, the buyer has a very distinct and definite cost advantage of parchment over cellophane, and it is used on fish fillets as where a fish is filleted and then wrapped and put into a five-pound box. There is quite a bit of parchment used on that, and the General Sea Foods Corporation, which is a division of General Foods, used a great many quantities for years. We have got some of that business, but now there is a change in the type of package, which is in the direction of a cheaper package. They are putting five fillets into a carton and overwrapping it with wax paper. We get, the last report I had, about 50 per cent. of that business, and the wax paper people get about 50 per cent. of that business.

Q. Can you give us some examples of accounts that have
8769 shifted back and forth in their use of cellophane and parchment in frozen fish?

A. Well, I think Gloucester Fisheries up in Gloucester, Massachusetts, is one. I just mentioned the General Sea Foods Corporation. I think you can take the names, which escape me at the moment—take practically every fishery on the New England coast and you would find that experience to more or less degree.

Q. You mentioned also competition with polythene. Where do you particularly encounter that competition?

A. We find that in two very important fields within the scope of the frozen food field, Mr. Gesell. The first is in the field of frozen eviscerated poultry. At one time we had that business one hundred per cent. Eviscerated poultry is poultry that is cleaned, and the viscera removed under Government inspection, and it has been a growing business because it is an ideal way for the consumer to buy poultry. We had it one hundred per cent. But there were problems arose in connection with the handling of a hard frozen item in a frozen food cabinet in a retail store. A good deal of that business, which includes turkeys as well as chickens, a good deal of that business has gravitated within the past two years to polyethylene because of the extreme durability of polyethylene under low temperatures, which is a factor which we never claimed to have. As a matter of fact, cellophane does not
8770 have that under extreme conditions of handling.

Q. What other materials were used on frozen poultry?

A. There is a considerable amount of pliofilm used on frozen poultry for the same reason that it will withstand that to a great extent, and Cry-O-Vac has also come into that picture.

Q. How much of the business do you think you have today compared to the one hundred per cent. you had?

A. I frankly would be guessing if I tried to give that, Mr. Gesell, but the last reports I have had from the big four meat packers, which are large factors in the poultry field, from C. A. Swanson & Sons, who are big in the field, is that they are leaning in the direction of polethylene from here out for that kind of packaging.

Q. Can you give us any examples of business that shifted to these other films, specific accounts in the frozen poultry business?

A. Yes. You may take the big four meat packers as a start. I mentioned Swanson, did I not?

Q. Yes.

A. I believe the Omaha Cold Storage Company at Omaha is another that I have in mind. At the moment that is all I can think of offhand.

Q. Do you have an estimate of the percentage of units of frozen food wrapped which are wrapped with Dupont cello-
8771 phane?

A. Yes.

Q. What is it?

A. We estimate that while it was at one time, as I said, one hundred per cent., that it is today in the range of 20 to 30 per cent.

Q. Now I would like to take up even more briefly a few other specific uses. What about potato chips and snacks? How much do you sell for that use?

A. Our sales in 1951 were about eight million pounds.

Q. I guess we all know what potato chips are. What do you mean by snacks?

A. In snacks we classify in the snack category a wide variety of products such as, well, popcorn, for example, Fritos, which is a patented type of corn product, such things as pork skins—I don't know whether you ever heard of pork skins or not, but they are a very big seller in the south, and there are a great many of them that have particular names—but the cocktail type of delicacy of that kind.

Q. What other materials are sold for potato chips and snacks, flexible packaging materials?

A. Well, let me see, the biggest, of course, is waxed glassine. There are some units in foil; there are units in wax paper. There are cartons overwrapped in wax paper and glassine. Those
8772 are the two major classifications of competition we find there.

Q. What do you estimate to be Dupont's percentage of this use?

A. We estimate that use to be again in that class of product in the neighborhood of 20 to 30 per cent.

Q. How much did you say you sell?

A. Eight million pounds.

Q. What have been some of the obstacles met by cellophane in selling for potato chips and snacks?

A. One of the big obstacles we met for years was the theory that light turned potato chips rancid, and for a number of years we actually only had one potato chip account in the United States that was worthy of the name, and it was the Wise Potato Chip Company in Berwick, Pennsylvania.

Q. What were some of the other obstacles?

A. The other obstacles are cost, principally cost, and in the case of those who put potato chips in cartons such as the—there is a big one in Detroit which I can't think of right now—it was the matter of hand filling, for example, and until machines were developed that would fill potato chips with fair speed, that was ruled out of the question. We had the same kind of problem that we had in the bread field even after we made some progress when, for example, the price potatoes or oil would go up. We would go off certain items because they were not able to absorb that cost.

8773 Q. Can you give us some examples of shifts in business and competition in potato chips and snacks as between these various materials?

A. That has, of course, happened as a constant problem. I can only think at the moment of two that remained in my mind. I think one was the Gordon Foods down in Atlanta and the H. W. Lay Company also of Atlanta. They went into glassine on some of their lower-priced lines after they had been in cellophane. We have gotten some of them back again, but not all, and we are splitting the business in that respect.

Q. What is the situation in cereals? What competing materials are there there?

A. The principal materials that we compete against in the cereal field are waxed glassine and wax paper.

Q. How are those materials used both as overwraps and liners?

A. Yes, sir.

Q. What percentage do you estimate you have of the cereal business?

A. Almost none. Four to six per cent.

Q. And the rest of it is in what materials?

A. The rest of it is in cartons that have the inner liner of glassine or the overwrap of wax paper. It is all packaged, of course.

Q. What have been the disadvantages or obstacles which
8774 cellophane has encountered in this use?

A. We have had a number of them, depending upon, naturally, whom we were talking about, and they assumed different importance. I was responsible for the sale of Kellogg & Company out in Battle Creek, Michigan. As you know, they are

the large producers of cereals. We had never been able to get them to use cellophane on an established brand. They were willing, however, to test the value of our material, and I can recall any number of instances—I say any number; I mean more than I can actually remember—where they would make tests periodically by sending corn flakes, for example, down to the Gulf Coast where the humidities were very high, and send along a waxed sample as a control unit, and come back and put it in their lab and find out exactly how good cellophane was as a protective unit. It always turned out that it was not as protective as their wax paper. Therefore, we were never able to induce the Kellogg Company, for example—and I know of no other—to use cellophane on one of their standard family size cartons.

The other factors were cost and filling, and the only way we ever got anywhere with Kellogg was to work with them in their production of an entire new type of unit.

Q. Now for a moment may I take up fresh produce? Do you sell cellophane to wrap fresh produce?

A. Yes, sir, we do.

8775 Q. With what other materials, if any, do you compete?

A. Well, if you include in the fresh produce both fresh fruits and vegetables, and I assume you do——

Q. I do if you do.

A. It belongs there. We compete with acetate, particularly in the spinach and tomato field. We compete with polyethylene both in the field of vegetables and fruits. We compete with pliofilm and of course, Sylvania. I would say those are the three main films with which we compete.

Q. What have been the obstacles, if any, that have been encountered there in the sale of cellophane?

A. I don't want to take the time, Mr. Gesell, to try to give you the whole history of the development of the produce industry, because it is very much like the meat industry in that for twenty years we have been trying to do something with it; but the industry at the present time is in the process of finding itself. Most of the business that we had, for example, in fresh fruits and produce up through 1945 was in what we call spinach re-packing, and it only amounted to 755,000 pounds a year; but then with the development of self-service produce along with self-service meats it began to expand.

Now, here are some of the problems. I am not an expert on the technicalities of produce, but anyone who is would tell you this:

That produce is a very difficult thing to package. Green

8776 produce, for example, is a living thing and it begins to die unless it has the proper kind of packaging, or if it doesn't get it it starts to contaminate. Well, we have changed our speci-

fications three or four times, for example, in as much as one year on how to package one item, so that there has been a trial of all these various materials in an attempt to find a proper produce package, and there is as yet no such thing as the so-called best produce package for any one item.

8777 Now we are active in the field of packaging spinach and various items at the wholesale level. We also do some work at the store level. We run into competition at the wholesale level with acetate, for example. Acetate and celanese has all of the spinach business on the West Coast. They have a considerable amount of the tomato business on the East Coast. But they have not been able to get any spinach business there.

We thought that we had an extremely big field in the packaging of carrots, until the development of polyethylene, and now that they are going to be packaged at the grower level we are losing out at the retail level because it is going back to the grower level in polythene, because it will stand icing across the country in the car, and cellophane won't.

It is difficult for me to give you an absolutely clear-cut picture of this thing, but this is the sort of thing that is happening, and it happens very fast. We think, for example, in this fast growing field, that we are going to package apples in cellophane at the retail level. Along comes pliafilm, with their stronger package, and they get into the packaging of five pounds of apples, at the grower level. We can't handle five pounds of apples with cellophane, but polythene can. So those two items are going to fight for that business at the grower level, and we are going to

8778 try to compete with them, will compete with them, in packaging smaller units of apples, at the store level. So the best that I can say to you about the produce industry and the way it is developing is that it is just a cat-and-dog fight as to who is going to get the business.

Q. Now two more brief end uses. You have mentioned—and they are not in the food field—you have mentioned paper goods. With what materials do you compete in paper goods?

A. We compete in the paper goods field with wax paper, glassine particularly, sulfite paper also.

Q. What do you mean by paper goods?

A. I include such items in the paper goods field as toilet tissue, paper napkins, paper tablecloths, various items of that kind. Paper cups and that sort of thing.

Q. Now another use is textiles?

A. That is correct.

Q. With what materials do you compete in textiles?

A. In textiles we compete with pliafilm, polyethylene, glassine. They, I would say, are the main items.

Q. What kind of goods are wrapped by these materials? What kind of textiles?

A. You have two classifications of textiles, Mr. Gesell. What are known as heavy textiles,—and they would be the sheets
8779 and pillowcases, which are relatively heavy wrapped; and then you come down into the field of light textiles, such as men's shirts and shorts, and dress shirts, that sort of item.

Q. How has your textile business developed since 1933? Has it grown or declined, in competition with these other materials?

A. Let's see. I will have to check. In 1933, to the textile business we sold about 1,400,000 pounds. In 1951,—I can't give you that correct comparison, Mr. Gessel. I am sorry. Because we lumped several items together in 1951 which we used to keep separately. I can't give you a comparison that I would want to make as a statement I could stand on.

Mr. GESELL. I think, your Honor, we might take our mid-afternoon recess.

The COURT. Recess for ten minutes.

(At this point a brief recess was taken.)

By Mr. GESELL:

Q. There is one important end use we have not yet covered, Mr. Smith,—cigarettes. How much cellophane does Dupont sell to the cigarette trade?

A. We sell about 23 million pounds a year.

Q. What were cigarettes being wrapped in when cellophane started to be sold for this use?

A. They were wrapped, I believe, in wax glassine.

8780 Q. What percentage of cigarettes do you understand are wrapped in cellophane today, as the outer wrap?

A. We estimate that we have between 75 and 80% of the cigarettes that are wrapped.

By the COURT:

Q. To follow that up, what is the percentage of cigarettes sold that are wrapped in cellophane?

A. About somewhere between 95 and 100 percent, your Honor.

By Mr. GESELL:

Q. What have been some of the factors that have affected the development of that business, Mr. Smith?

A. Well, I believe,—and bear in mind that I can't speak to you from personal experience in selling a cigarette company originally, but I was responsible for the sales to Brown & Williamson Tobacco Company, and therefore I know something about the thinking in the industry. Up until the time that cellophane was adopted on cigarettes, the industry never felt, and I doubt if they ever will

feel, but they did not feel at that time that they had a satisfactory package, for the protection of the product through the turnover period. When cellophane came along and was able to operate on machines and offer them something tangible in the way of the product that they could advertise to the consumer and deliver something that was advertised, that was when they decided
8781 to make the change.

Q. Now they changed to cellophane, and they have stayed on cellophane ever since; is that correct?

A. For the most part, that is correct; yes, sir.

Q. Have there been any accounts that have shifted out of cellophane at any time, as the outer wrap?

The COURT. Well, during the war?

Mr. GESELL. Yes.

The COURT. Were they wrapped in cellophane?

Mr. GESELL. Let us ask Mr. Smith.

The WITNESS. They were wrapped partly during the war, your Honor, because the War Production Board at that time offered them the opportunity of eliminating either one end or the other, foil or cellophane.

The COURT. That's right; there was a tinfoil put out.

The WITNESS. That's right. Although in the latter stages of the war, I believe, during the summer of late '44 or early '45, they were partly out, and they were out during the summer months when the humidities were high, and they were in in the winter months when the humidities were low.

By Mr. GESELL:

Q. Except for the war experience, have any other companies experimented with any other flexible packaging materials since cellophane got on the package?

8782 A. To the best of my knowledge, they have never stopped experimenting and trying to find a better package than they have now. Brown & Williamson Tobacco Company, in Louisville, who make Kools and Raleigh cigarettes, had both of those packages experimentally on the market in a complete one-piece foil unit. They didn't have the Raleigh package on for too long, because they returned to coupons, and they had to have some outer covering to hold the coupons. They kept the Kool package on in, I think it was, Detroit, for well over a year, attempting to evaluate the consumer reaction and general sales of that package in foil; but they have removed it, and we now have the item back in cellophane.

Q. To what extent are other flexible packaging material companies attempting to get the cigarette business?

A. Well, of course, they don't tell us about it, Mr. Gesell, and I can only tell you what we know, but they have experimented with all the films that we make that give better moisture protection, in the first place. They have experimented extensively with pliafilm. As a matter of fact, right now there is a machine operating on pliafilm in one of the plants, I think it is Brown & Williamson, operating an experimental machine on pliafilm, at the moment. So that they are looking constantly for an improved package, and we don't feel that the cigarette is a turn-your-back market, that we can turn around and forget it, because
8783 something is going to happen if we do.

Q. Are you competing for additional business in the cigarette trade, and, if so, in what way?

A. I don't quite understand that question.

Q. Let me ask the question a different way. Are you experimenting with new and different types of cigarette packages?

A. Oh, yes. Yes. We don't happen to be as of this particular day, but not too long ago test experiments were run down at Brown & Williamson on a special laminated cellophane that was intended to completely replace, if it were successful, the present foil and paper cup that is used, and which is presently overwrapped. Well, we have not been successful to date, but we have not given up trying, because the cigarette companies are looking for a better package if they can find one.

Q. Now you told us somewhat earlier in your testimony that you had not only participated in some successful promotions of uses for cellophane, but you had participated in some unsuccessful promotions, or at least had determined there were certain fields where cellophane could not be sold. Can you name what some of those fields are?

A. Yes, I think, some of them. I made at one time a very careful study of the entire drug field. There were some in our
8784 organization who felt that that held great potential, for the protection of drug products. I made a study of that field, and my report at the time, as I recall it, advised our management to stop calling on certain segments of the drug field, not because particularly we didn't think that it was possible to get business, but because we thought that the effort that we would have to expend hardly would be worthwhile. And that is always, frankly, a practical consideration in the operation of any business.

Q. What materials have that field?

A. Well, there is a considerable amount of glassine used for the overwrapping of bottles; and in the ethical specialty field, which is the field where, for example, Parke-Davis will market a prescription already packaged for the druggist, there is a considerable amount of glassine over-wrapping in that field; but

we felt that while we could do just as good a job, from the standpoint of trying to get it it would hardly be worthwhile, and we have abandoned the effort there.

Q. Have there been any other examples of unsuccessful promotions or uninteresting opportunities?

A. Yes; we have never been, as you may have gathered from the statement I made before, successful in promoting a national cereal package. We have tried that in a great many ways and——

Q. Well, you have covered that. Are there any others?

8785 A. Yes. The laundry field was one where we decided that our opportunities were not particularly good and abandoned our attempts to get cellophane in that field, which glassine has almost a hundred percent.

Q. What about butter?

A. In the butter field, we had a very big promotion in 1936, I believe it was, and that failed, for two reasons. In the first place, we didn't have the film; the coating on the film disintegrated in contact with the salt of the butter. The other reason it failed was that the merchandising practices and methods of distribution at the time simply would not permit them to pass cost on to the dealer.

Q. What materials have the butter field?

A. In the butter field, the principal materials are parchment and greaseproof paper. However, we are going to get some butter business, I think, in about 30 days, and it takes a long time to break some of these markets or even break into them.

Q. Now I want to turn to a different subject, Mr. Smith, the subject of trade reports. We have had a lot of talk about trade reports in the case. Have you ever written a trade report?

A. I most certainly have.

Q. How many would you say you had written in your day?

A. Oh, I would say, let's see, I would say in the

8786 neighborhood of 2,000.

Q. Have you ever read trade reports, other than the ones you wrote yourself?

A. Yes, I have read trade reports.

Q. What was the occasion of your reading trade reports?

A. Well, I have read trade reports, of course, as a district manager, as an assistant district manager, I read them literally by the thousand, in developing these industry studies I have been talking to you about. I still read them practically every day, because it is the only way in which we can get the information we have to get from the field.

Q. How many would you say you had read in a lifetime, relating to cellophane?

A. Well, I don't want to seem fantastic, but I am guessing over 40,000.

Q. What are these trade reports used for, Mr. Smith?

A. Well, we use them as a guide to the operation of our business. I think I can make this statement without qualification,—I don't know how we could run our business without the trade reports.

Mr. MINICUS. May I ask for an explanation of the relevancy and materiality of this line of questioning, your Honor?

The COURT. What is it, Mr. Gesell?

8787 Mr. GESELL. The government contended that the trade report was an unreliable document, not used by the company in the course of its business, that the information contained in them was inaccurate, and that they were not to be given any credence in this court; and your Honor stated that you expected, or you inquired of me whether there would not be testimony to show that these are regularly made, in the regular course of business, and relied on, and are accurate and truthful. I said you would have such testimony, and here it is.

The COURT. Do you wish to be heard, Mr. Minicus.

Mr. MINICUS. Just that the testimony so far has shown no relationship with individual trade reports.

The COURT. I imagine he is going to develop what a trade report is with respect to the Dupont Company. If there is an objection, it is overruled. Proceed.

By Mr. GESELL:

Q. Will you explain your last answer to us? What are they used for? What kind of data do you get from them? And why do you need them in the running of your business?

A. Well, our trade report is an organized method of acquiring information from the field. Now that information covers such factors as these. It covers, at the necessary intervals, the production of a particular account of a certain type of product. Once a year at least that information has got to be written up on

8788 every single report, unless, for example, there is an important change in the middle of the year, or at any time, and then our requirements are that that information be reported on an amended basis.

We use the trade report to report competition, the extent to which other materials are either encroaching upon our business or developing in fields in which we are interested. We use the trade report to report trends in merchandising and marketing. Otherwise, there would be no possibility to study such industries as I have described to you today. I would have to start from scratch. Whereas it is not necessary to start from scratch with this type of operation.

We use the trade report for a man to report problems. If a salesman can't sell, he has a problem. We don't ask him to keep his problems to himself. We want to know what they are. Otherwise, we can't help him.

We use the trade report to describe how successful certain methods of promotion and market research may have been. It is practically the only gauge we have as to whether or not we have spent our money wisely.

We use the trade report as a method of reporting complaints of the customer. We use the trade report to ask for assistance from the technical service section, and that is requested very frequently.

8789 That is the general nature of the use of the trade report in this business; and I repeat to you, Mr. Gesell, we could not run the business without it, and we do not consider that information unreliable.

Q. To what extent are salesmen required to make these reports?

A. They are required to make them at stated periodic intervals, depending upon the size of the account. In other words, we break our accounts down into certain sizes, and those reports are made anywhere from twice a year, two or three times a year, up to as many as 48 times a year.

Q. What instructions, if any, are given with respect to the method of reporting, having in mind the reliability of the information presented? Are the salesmen given any instructions as to how they shall report?

A. Yes; we have a procedure which is given to men in training and which is followed up by district offices, to see that we have the kind of reporting, both as to statistical information and to the pertinence of data that we require. They are instructions which each salesman has. And when those instructions are not followed, either because they are not understood, we see that they are; because, as I said before, it is the Bible of the business.

Q. In your experience have you had occasion to check from time to time upon the reliability of trade reports?

8790 A. Constantly, in so far as evaluating their reliability is concerned.

Q. What has been your experience with respect to whether or not such reports have been accurately made?

A. My experience has been this, that with rare exceptions—and there are always exceptions—I can state categorically that the trade reports as we get them from our men, while they may occasionally contain, and often do, mistakes in judgment—and that is the reason why I am giving you these percentages in business in ranges, instead of an accurate figure—we consider that they are composed of reliable information, and they are reliable to this

extent, Mr. Gesell, we make decisions on the basis of that information. We have, and we will.

Q. I want to turn to another subject——

Mr. MINICUS. Before he does that, your Honor, may I point out that we never got to the point that we were discussing a few minutes ago, that the particular trade reports in evidence have not been qualified as to their reliability or the reliability of the hearsay statements in them? The witness has testified that there are exceptions to this rule of reliability. We have had before us just a few selected trade reports. The witness has attempted to justify all trade reports generally, and said there are exceptions to this. Now we know nothing about the particular trade reports that were put in evidence in this case, from this testimony.

8791 The COURT. I don't think the testimony was intended for that purpose, to pick up any particular trade report. The witness has not even been asked to look at one. As I accept the testimony, it is to inform the Court in general what is the function of a trade report in the business community, and he has testified on that. It does not meet your point, as to the weight I shall give to the exhibits, whatever the numbers are.

Mr. GESELL. But it does, of course, in this repect, your Honor, in that it shows that if these were systematized reports and kept in the regular course of business and relied on in the conduct of the business,—

The COURT. That is right.

Mr. GESELL. Your Honor is in a position to give greater reliance to them than he would otherwise.

8792 By Mr. GESELL:

Q. I want to turn to a different subject, Mr. Smith. That is the question of competition with Sylvania. From time to time you have mentioned examples of competition in the discussion of the development of these particular end uses. Will you state whether or not Sylvania has sold cellophane for the same end uses that you have been describing in your testimony since you took the stand?

A. They have.

Q. How would you characterize Sylvania's competition?

A. I have never under-estimated Sylvania as a competitor. I will characterize their competition as extremely vigorous.

Q. What form has that competition taken?

A. It has taken the form of calling on the same type of trade that we call on, developing the business to the extent it could be developed, competing with us for a greater share of it where we had the greater share. It has been an out and out straight competitive proposition.

Q. State whether or not Sylvania has been able by competitive methods to take business from Dupont on specific accounts?

A. Oh, yes, yes.

Q. Can you give us some examples?

A. I am not going to pretend to know why or how. I only know the end result, and that is this: That in some of
8793 the largest accounts that I have had any experience with they have had considerably more than the so-called percentage of production ratio. For example, I am thinking of the Purity Bakeries Corporation in Chicago. They had at least 50 per cent. of that business. I am thinking of Kroker Grocery & Baking Company down in Cincinnati. They had at least 45 per cent. of that business. They had 65 per cent. of the business of the Ward Baking Company. They had almost 100 per cent. of the business of the big and little four packers at one time. I characterize that as rather vigorous competition and I think somewhat successful.

Q. Are there certain customers of Sylvania which have bought cellophane exclusively from them and who you would characterize as large or important customers?

A. Yes.

Q. Can you name some of those?

A. I can think of one of them: The American Chicle Company. There have been several customers in the Quality Bakers of America who are 100 per cent. Sylvania customers. At one time the Liberty Baking Company of Pittsburgh, a very large independent, was one that I can remember offhand. I mentioned the packing industry, Swift & Company. At one time I don't think they bought a single pound from the Dupont Company.

Q. Do you know of any customers of Dupont that have
8794 not been solicited by Sylvania?

A. I do not.

Q. Do you know of any customers of Sylvania that have not been solicited by Dupont?

A. I do not.

Q. Have you ever had any instructions or has anyone ever indicated to you in any way that you should lay off some piece of Sylvania business and not try to get it yourself?

A. Emphatically no.

Q. Have you ever failed to develop a particular area of business in order to leave it to Sylvania?

A. No, sir.

Q. Mr. Smith, what has been the extent of your contact with representatives of Sylvania? Have you ever met their sales managers or assistant sales managers? Have you ever talked with them?

A. I would not know them if they walked in this room. I have never seen them.

Q. Have you ever had any contact with any representative of Sylvania in your selling experience?

A. Yes, I have.

Q. When was that?

A. That was in 1935 or 1936 I ran into the Sylvania salesman operating in the Pittsburgh-Cleveland area a couple of times. I think his name is Edelstein, if I remember
8795 correctly.

Q. What do you mean you ran into him?

A. I would see him in the hotel lobby. That is the extent of it.

Q. With the exception of that have you ever had any contact with any representative of Sylvania?

A. No, sir, I have not.

Q. There has been a charge in this case made, Mr. Smith, that Dupont has sought to encourage the semblance of competition with Sylvania, but that that competition has not been real. What have you got to say about that?

A. Well, you cannot expect me to speak in answer to that question——

By the COURT:

Q. Without emotion?

A. Without referring to nineteen years of experience, and if the Court will permit me, I would like to say that is the silliest thing I have ever heard.

By Mr. GESELL:

Q. Has anyone at any time ever said in your presence to you or to anybody else or have you ever heard in any way directly or indirectly that there was some understanding with Sylvania as to the prices at which Sylvania would sell and Dupont would sell cellophane?

A. I have not.

8796 Q. What about Olin? Does Dupont compete with Olin Industries?

A. We most certainly do.

Q. When did Olin start to become a factor in the market?

A. From the very first day they began to produce.

Q. About when was that?

A. I think it was in June of last year, June or July, the middle of the summer some time.

Q. To what extent have they called on your customers and solicited business?

A. I cannot answer that in terms of all of our customers, but I can answer it in terms of all of our big customers.

Q. What is the situation as to the big customers?

A. Well, they have called on all of our big customers, and at the moment I don't know of one I can think of that we would classify as a very large customer who is not buying from Olin Industries.

Q. And they are buying cellophane?

A. They are buying cellophane.

Q. Now I want to come to the question of control of prices, and the charge that prices for cellophane have been arbitrary and non-competitive. What has been your experience, Mr. Smith, as to the effect upon Dupont's business of the various price reductions which have been made by Dupont during the years?

8797 A. In my experience we have never had a price reduction that has not resulted in some increased business to us. Every time a price is reduced when you are operating within the economic pattern of packaging, something that has formerly resisted you because of cost begins to become a near term possibility, and your chances of competing are better; and that has been the history of our price reductions.

Q. Has there or has there not been price competition in the sale of cellophane in the flexible packaging material markets?

A. Oh, very definitely.

Mr. MINICUS. Objection, your Honor.

The COURT. Articulate your objection.

Mr. MINICUS. The objection is based on the fact, your Honor, that here again we have a conclusion of law of price competition.

The COURT. I have that in mind. I am going to allow the question. He is assuming a state of facts which you claim he has not yet proven or, in fact, is not entitled to prove.

Mr. MINICUS. That is it.

The COURT. I have your objection in mind.

Mr. GESELL. Of course, we have been spending over a day developing the factors, your Honor, for these conclusory questions.

The COURT. But you are not going to get me to arrive
8798 at that point today, Mr. Gesell.

Mr. GESELL. No; your Honor will have a lot of work to do.

By Mr. GESELL:

Q. I gather from the testimony that we have had, Mr. Smith, that the margin between the price of cellophane and glassine and wax paper has narrowed over the years, and I want you now to assume that that gap between the price of cellophane and the price of these other materials widened, let us say, 10 per cent. What in your opinion would be the effect of the widening of that gap upon your sales, which I think you said are of some nine million pounds to the white bread industry?

A. Well, I am not going to try, Mr. Gesell, to put a percentage figure on the business that we would lose, but if we reverse the situation, as it is easy for me to do and look back at the progress we have made when we have been able to narrow the gap, it is not difficult for me to conclude that we would lose a considerable amount of business. How much I don't pretend to say.

Q. What would be the situation in specialty breads?

A. I think the same thing would hold true. I don't know who would give up cellophane or how much they would give up, but it is inevitable that we would lose business.

Q. What is the situation in meat?

8799 A. I think identically the same thing would hold true. There would be certain items that are at the present time so near the outside range of cost that 10 per cent. obviously would hurt us, and I don't know how much.

Q. Is that true also as to candy?

A. It most certainly is.

Q. What about cigarettes?

A. I don't know. I don't know, Mr. Gesell, what would happen in the cigarette industry, except that they are extremely cost conscious, and just what weight a 10 per cent. widening of the gap would mean I would not know, but it would certainly do one thing: It would increase our vulnerability to other materials.

Q. Now, with respect to quality it has been charged in this case repeatedly that Dupont has the ability to affect the quality available to the purchasers, that it can sell a good quality product or a poor quality product, and it does not make any difference because Dupont has a monopoly and everyone is forced to buy from it. What have you got to say about that?

A. Again from the standpoint of my experience I cannot classify that as anything else but absurd, because the efficiency with which our material operates is an important cost factor in every business that I know of where it is used, and if through any quality de-

8800 ficiency we increase the cost of operating our customers' business, I cannot but fail to see how he is going to give that business to someone else.

Q. Tell me this: To what extent do your customers keep alert to developments as to quality?

A. Well, let us start with the cigarette companies. The cigarette companies are constantly running checks not only on machine efficiency, but on the moisture protection that they get from an average sample of a given shipment of cellophane. If the efficiency goes down 1 per cent. it is a tremendous loss to them in terms of dollars, and if there is any drop in efficiency we hear about it immediately, and I can tell you that we try to do something about it.

Q. What kind of facilities do they have for testing the quality of cellophane, the cigarette companies?

A. What kind of mechanical facilities I can't answer. They have ways of testing the protection quality, I know, through testing the gain or loss of moisture content of tobacco. It is easy for them to test the running efficiency on a machine, because they simply keep an accurate check on the yield per pound.

Q. What about some of the food customers? To what extent do they determine and to what extent do they seek to determine quality differences in cellophane?

A. Well, in the bigger accounts, and that is where a large percentage of the business is, in recent years particularly there
8801 has been the establishment of laboratories for just that sort of purpose. Now, the General Foods Corporation is a good one. General Foods Corporation periodically test all materials that they get, both for efficiency in performance on their products and for efficiency in production. As a matter of fact, they write the specifications for the purchasing agent. They tell him what he is going to buy.

In Kraft Foods in Chicago they have a very extensive laboratory in which they are constantly running tests on materials, materials of all kinds that they presently buy and kinds that they are testing as to possibilities for buying.

Down at Kroger in Cincinnati, not a thing Kroger buys in the way of materials fails to pass through the testing laboratory of the Kroger Food Foundation. I think you will find that extends pretty relatively.

In the case of the converter whose waste on cellophane is high anyway, he is constantly after us to improve it, and the moment that it might go down he tells us exactly what we are going to have to do if we want his business.

Q. Now, finally we come to the power to control the supply available. It has been repeatedly suggested in this case that Dupont can sell any amount it wants, can make a lot or a little, and change the supply to suit its own purposes. I want to ask you first is Dupont able today to sell all of the cellophane it makes?

A. No, sir, we cannot.

8802 Q. How many machines are not operating today?

A. I would estimate we are operating at approximately 72 per cent. of our capacity.

Q. Are you making any efforts to sell the remainder of your capacity?

A. We most certainly are.

Q. Do you know of any use today, any place today where you could get an order for cellophane just by going out and asking for it?

A. I most certainly do not.

Q. It has been suggested that there is a market here, Mr. Smith, just waiting for cellophane and all you have to do is toss it in and everybody will buy. What have you got to say about that?

Mr. MINICUS. What period is the gentleman speaking of, your Honor?

The COURT. Presently, 1952.

Mr. GESELL. That is what the question is.

Mr. MINICUS. For the entire year of 1952?

The COURT. Why don't you develop that on cross-examination?

Mr. MINICUS. His answers will be indefinite for cross-examination if we don't know exactly the time they are talking about.

The COURT. What time are you talking about, Mr.
8803 Gesell?

Mr. GESELL. Three minutes of four, your Honor. Perhaps we should adjourn.

The COURT. It is four o'clock now. Adjourn Court to tomorrow morning at 9:30.

(At this point the trial was adjourned to Thursday, April 3, 1952, at 9:30 o'clock, a. m.)

8804 THURSDAY, APRIL 3, 1952, 9:00 O'CLOCK, A. M.

Present: As before noted.

Mr. GESELL. In accordance with the arrangement, your Honor, that we made yesterday we interrupt Mr. Smith's testimony to call Dr. Davidson, whom I now call as a witness.

JOSEPH GEORGE DIVIDSON, called as a witness on behalf of the defendant, having been duly sworn, testified as follows:

Mr. GESELL. Your Honor, Dr. Davidson is an officer of the Union Carbide & Carbon Company. He appears here under subpoena with respect to two charges which are in issue in this case. The Anti-trust Division contends that Dupont excluded Carbide from engaging in the cellophane industry and that it was a competitor or potential competitor in the field of manufacturing cellophane.

The Anti-trust Division also contends in connection with Paragraph 33 (e) of the complaint that Carbide was excluded and suppressed in its competition by unlawful patent devices and tactics; in other words, one of the patent interference situations.

Dr. Davidson is going to testify on both these matters.
8805 We believe his testimony will establish that the charges are unfounded.

Direct examination by Mr. GESELL:

Q. Will you state your full name for the record, Dr. Davidson, please?

A. Joseph George Davidson.

Q. What is your present position with Union Carbide & Carbon Corporation?

A. As to that particular corporation I am vice president. I am also president of a division of the Union Carbide & Carbon Corporation. That is the Carbide & Carbon Chemicals Company. I am president of that company.

Q. So you are the president of the company's chemical activities?

A. Yes, that is it.

Q. What has been your professional training?

A. Well, I am a chemist by profession. I have a Ph.D. in chemistry from Columbia University and I have followed professional chemistry all my life.

Q. How long have you been with Union Carbide & Carbon Corporation in one capacity or another?

A. Since 1923.

Q. How long have you been president of the chemical company?

A. I became president of the Chemicals Company in 1944.

8806 Q. What was your position prior to that in the chemical side of the activities of the company?

A. I first was a salesman; then I was General Sales Manager; in 1932 I became Vice President in charge of sales for the Carbide & Carbon Chemicals Corporation, which was then a separate company. It was a separate company in the sense—it is now a division, but at that time it was operated as a separate company, although it was owned by Union Carbide & Carbon Company.

Q. Directing your attention to the period 1931 to 1934 what part, if any, did you play at that time in the formulation of the company's policies, with particular reference to the company entering new lines of business?

A. Well, I was always consulted. Our plan then and our plan still follows the following lines: When we consider the production of a new product we first make an engineering survey to find out how much the plant will cost; we make another survey to find out how much the product will cost; and then simultaneously we make sales surveys to see how much we can sell and at what price; and putting all those together we find out what our return on investment is going to be; and then we either do or do not go into it, depending on whether that investment is satisfactory or unsatisfactory.

Q. Was your position at that time such that you participated in conferences and discussions looking toward the de-

8807 velopment of new projects?

A. Oh, yes, very definitely.

Q. Are you familiar with Carbide's interest in a product that is known in this case as glycol cellulose or which I think is sometimes called hydroxyethyl cellulose film?

A. Yes, I am quite familiar with it. As a matter of fact, I was the one who—that product was originally developed by another company and I made the contacts with that company and arranged an option agreement with them and finally exercised the option.

Q. Is this glycol cellulose a regenerated cellulose?

A. No, very definitely not.

Q. Will you in not too technical terms briefly tell us what the product is?

A. Well, perhaps I can put it this way: As I understand it, a regenerated cellulose is a product—rather you start with cellulose treated with something like carbon bisulphide, which makes xanthate, and then you extrude it into an acidulated solution and it comes back as cellulose.

Our product, we start wit' ellulose and we treat it with ethylene oxide and it then becomes hydroxyethyl cellulose and it stays that way. When we re-precipitate it it is still hydroxyethyl cellulose. It is as different from cellulose as cellulose acetate is from cellulose. It is different from regenerated cellulose. It is a different chemical compound.

8808 Q. Now, you say that you made contacts with the company that had this process. What company was that?

A. That was the Burgess—I am not certain whether they went by Burgess Battery Company or whether they called themselves the Burgess Company, but at least it was a company headed up by Dr. Burgess whom I knew quite well.

Q. Where was it located?

A. Their chief offices—at least their plant was in Madison, Wisconsin, but I had my initial contact with Dr. Burgess in Chicago at their Chicago office.

Q. Did Carbide obtain a license to the process from Dr. Burgess as a result of your negotiations?

A. We arranged an option agreement and we took over the patents. We, in effect, bought the patents.

Q. What work, if any, did you do thereafter in the development of that product?

A. Before we actually exercised the option and from the time when we first contacted them until we did actually exercise the option a period of some two or three years elapsed.

Yes, we sent some of our chemists up to their laboratory at Wisconsin and worked there, for, as I recall, more than a year, perhaps two years, and we operated the small equipment that was available, and in addition to that we set up other equipment at

Forest Parks Laboratory which is also located in Madison, Wisconsin.

8809 Q. Was Burgess actually manufacturing this material?

A. Yes, in a small way, but he never dried the material. His operations were at that time, as I recollect, confined to the production of a sheeting about sixteen inches wide, but he never dried that sheeting. He slit it and would end up with a number of rolls of wet tape. That tape was sold for bottle closures. You cut a piece of tape off and wrapped it around the bottle and it would shrink. We took that over, operated that, and sold some of the material in that same field.

Our work at Forest Parks Laboratory brought it up one more step. We dried the film so that we would have clear, transparent sheeting, and that work, as I say, took at least a year and perhaps it was two years or maybe more.

Q. Did you sell any of those dried sheets experimentally?

A. We gave a lot of it away after a while. I don't remember that we had any—we did a great deal of experimental work. I don't recollect whether we actually sold any or not, but we did a great deal of work packaging cigarettes, chewing gum, and many other things.

Q. When did these experiments take place and work with approximately?

A. From 1932 through to 1934, I would say in that area.

Q. As I understand the situation, Carbide itself never manufactured this product?

8810 A. Not on a commercial scale, no.

Q. What, if anything, did Carbide do in seeking to interest others in the manufacture of the product?

A. We interviewed, and I did a lot of it myself personally—we interviewed a number of companies endeavoring to induce them to enter into the manufacture of this product which we called Glyfilm. That was our trade name for it.

Q. You say you interviewed and worked with a number of companies seeking to interest them in the manufacture?

A. That is right.

Q. Why were you interested in encouraging someone else to manufacture the product, Dr. Davidson?

A. Well, may I give a little background in answer to that question, sir?

Q. Certainly.

A. We began—the company that I am still with began in 1921 with just an idea the manufacture of aliphatic organic chemicals, and we operated from 1921 to 1929 in the red. We lost a lot of money. Along about 1929 we began to make a little money, and this project came up in the early thirties, from 1931 or 1932 on.

We didn't have too much cash, and some of our own people did not know whether we in this new chemicals company were ever going to get any place or whether we were going to be a flop. So we were not in a position to ask for a large sum of money,
8811 which would run into millions of dollars, to build a plant to make this sheeting. But we were manufacturing the raw material in which we were interested, a product known as ethylene oxide. We had that for sale, and that is what we wanted to sell, because our return on that investment would be, as we figured it, considerably better than the return on this transparent sheeting field, and it did not have the risk that the other business had. So we did our darnedest and I did my best to interest a number of other concerns who were in a position to go into the business or who were already in that type of business, although with a different product.

The COURT. Could I interrupt?

Mr. GESELL. Yes, certainly, your Honor.

The COURT. Mr. McGlothlin, would you look through the physical exhibits and see if we can present to Dr. Davidson one of those exhibits so that he can point out as to how close his product resembled any of these different films that we have? Do I make myself clear?

Mr. MCGLOTHLIN. I think so.

Mr. GESELL. I am going to ask him what some of the properties were in a moment, and perhaps we could get those particular films that were in the envelope.

The COURT. Yes.

By Mr. GESELL:

Q. So that I understand what you just said, Dr. Davidson, it was that you as vice president and sales manager of
8812 the company were seeking to interest someone else in the manufacture of this product so that Carbide could sell them glycol which was an essential raw material?

A. Ethylene oxide.

Q. Ethylene oxide, which was an essential raw material?

A. Yes, sir.

Q. Now, what company or companies did you first approach with respect to this product?

A. I don't know which company we approached first, but almost simultaneously we approached the Dupont Company and the Sylvania Company.

Q. Why did you first approach those companies?

A. Well, sir, they were already in the business—in the business of making a transparent sheeting, a transparent wrapping material, which of course our product was.

Q. With whom did you discuss the matter in Dupont?

A. In Dupont, as I recollect, I first talked with Dr. Bolton, who happened to be a friend of mine from school days. Afterwards I talked with various people. I talked with Mr. Wardenburg, who was my friendly enemy for a good many years, and I talked with Mr. Yerkes, and I talked in New York with Mr. Hatt.

Q. Can you tell us what the course of your negotiations were with these gentlemen with respect to interesting Dupont in the manufacture of this Glyfilm?

8813 A. Well, we showed them some of our product, and it was in our estimation a good product. Then most of the discussion got back to the cost of ethylene oxide, we endeavoring to prove to them that they could make our product cheaper than they could make their product which is known as cellophane. We thought that we could demonstrate there was a saving of, as I recollect, two cents a pound out of about twenty-five cents a pound; in other words, about a ten per cent. saving; but we never did get them to the point where they took it up.

Q. Did Dupont conduct any experiments or studies in conjunction with Carbide as to the process and its efficiency and the other phases of the operation?

A. Yes. We went and I made one trip myself to their Black Rock plant near Buffalo where we brought out our ethylene oxide. They provided the cellulose. We told them how to treat it. We didn't actually do the work and we were not permitted to see them do the work, but they followed out our instructions and did make some sheeting material.

By the COURT:

Q. What was the secrecy about it?

A. Well, if you will, they didn't want us to learn too much about how they made cellophane. We were perfectly willing to tell them how we made our product, but we were in their plant and they didn't want us to see how they made their cellophane.

8814 By Mr. GESELL:

Q. What reasons did Dupont give for not going along with this idea of shifting from cellophane to Glyfilm?

A. Well, we maintained that Glyfilm would be about six to eight per cent. cheaper to manufacture. They didn't agree with us. Our interests were solely in the price of ethylene oxide, and we endeavored to reduce the price, tentatively reduce the price, about seventeen cents to fifteen cents a pound, but that just didn't seem to be enough to swing the process.

Q. What did they say, if anything, was wrong with the process? What didn't they like about the process?

A. It was not necessary for them to tell us. There was one rather serious thing. After you had extruded the wet film it had to be dried, and we had to evaporate a lot more water than they did in the manufacture of cellophane. That was a rather costly item.

We had some other advantages: You could use the scrap and you didn't have to hold your solutions as they do for ripening time. We thought that we came up with a savings of about eight to ten per cent., but apparently they didn't agree with us.

Q. Did they discuss with you at all the difficulty of casting or other operating difficulties with the film?

A. They mentioned them, but we didn't actually see
8815 them.

Q. Did they discuss with you at all the question whether the film was weak or strong when wet?

A. When wet our film was not as strong as theirs, but when dry we thought it was just as good.

Q. Well, now, I believe you told us that you also negotiated with Sylvania?

A. Yes, very definitely.

Q. Did Sylvania entertain the notion seriously of going into this development and work with you along the lines that Dupont had?

A. Oh, yes. I knew Dr. Wallach, who then ran that company, quite well. I remember I drove down to their plant at Fredericksburg with him one day and we there conducted some tests which we were a little bit irked about, because they were a little more secretive than the Dupont people were. They even put up—the work was done in the back part of a room such as this courtroom, let us say, and they put a temporary wall between us and them. We were on this side and they were on that side, and they would come out and ask us "What do we do next?"

By the COURT:

Q. Did they blindfold you?

A. Darn near it.

8816 By Mr. GESELL:

Q. And I think you said they decided not to go along with the project?

A. Ultimately they decided not to go along with the project, yes, sir.

Q. Did you approach thereafter other concerns in an effort to interest them in the manufacture of this product?

A. Yes, we were still trying to sell ethylene oxide and we contacted quite a few other companies.

Q. Will you name some of them, please, sir?

A. The Goodyear Tire & Rubber Company was one of the companies that looked like a good prospect, because they already were making a transparent film called pliofilm, which was a rubber compound.

We also were in touch with the Marathon Paper Company, and we did make a deal with them for a while, but not on transparent sheeting. They paid us a royalty I think of $10,000 a year for a couple of years for the use of this product for strengthening their paper.

We also were in touch with the company that has now developed into the Olin Industries. I think at that time we were dealing with them through the Winchester Arms. And Industrial Rayon. For the moment that is all I can think of, but there were several others.

Q. Did any of those concerns at any time decide to go
8817 into the manufacture of this product?

A. No, sir, none of them decided to go into it. Several of them came close, but none of them actually did go into it.

Q. Over what period of time were these negotiations with these various concerns taking place?

A. Quite actively until, I would say, 1936, in there some place; then there was a hiatus; then in the early forties the Goodyear Company came back again and showed quite a bit of interest, and we thought that they were going to go into it. That was either 1941 or 1942. But again they dropped it. One of their men, Dr. Sebrell, was very anxious. He was all for going into it, but his superiors overruled him.

Q. As I understand it, none of these concerns ever decided to go ahead with commercial manufacture?

A. No, sir, none of them did.

Q. Has anybody ever made this film commercially, Dr. Davidson, as a flexible packaging material?

A. Not to my knowledge, no.

Q. Well, when you were not able to interest anybody else why didn't Carbide itself decide to go ahead and make this film?

A. Well, over a period of time our inability to interest anybody else had some impact upon us. They all told us the same thing:

Number one, that the amount of water to be evaporated to
8818 give a dry film was an expensive operation; and, secondly, there was an adversely held patent, the Dreyfus patent, which was controlled by one of the Celanese companies that did not expire until 1941, and both our la[illegible]rs and the lawyers of most people that we talked with felt that that was something of a

bar, because it rather broadly claimed glycol cellulose, hydroxyethyl cellulose, as we call it.

By the COURT:

Q. Clear this point up for me. You say you had this water problem?

A. Yes.

Q. Nevertheless, you say you could manufacture your product ten per cent. cheaper than Dupont could?

A. We thought so, yes. There may have been other difficulties that we were unaware of. But, after all, your Honor, eight to ten per cent., that is not a big margin in the chemical business. In the first place, we only thought it was eight to ten per cent.—an eight to ten per cent. advantage. We could have been wrong by three, four, or five per cent. It might have been an even break. If it was something different, if we had a fifty per cent. advantage, then that would have been a very different nature. But the advantage was not big enough to induce other people, and in the end it was not big enough to induce us to take a chance.

The COURT. Proceed.

8819 By Mr. GESELL:

Q. You have mentioned the patent and you have mentioned the cost or the difficulty of the water evaporation problem. Were there any other factors which led to Carbide's decision not to go ahead?

A. Oh, yes. Really the controlling decision in the end was this: The Market for ethylene oxide was constantly expanding, and at that time we were the only manufacturers in the country. We had no patent position on it, but we were pioneers. Everybody else thought we were crazy getting into this kind of business and we would probably go broke, so they let us alone for about ten years, and in that period of time the production of ethylene oxide increased enormously, and we were selling all of it and making a very good profit. We considered, of course, from time to time why should we take some millions of dollars and go off into a field which had some mechanical operations with which we were not familiar, and in the end we might not even be able to compete. So we put our money and our energy into the production of chemicals, into the enlarged production of chemicals. That was one of the most important reasons.

Incidentally, I might say to very good advantage we grew rapidly and, while we made some money—I think when we began in 1921 even up to 1929 we were just a little bit of a struggling company—I think our decision was a wise decision.

8820 We are one of the largest chemical companies in the country today now by following that theory.

I can add to that the only thing that we made that went into hydroxyethyl cellulose was this ethylene oxide, and there was only six to eight per cent. of the oxide that went into Glyfilm. Even today we have a policy that we are not particularly interested in processes unless we manufacture a rather overwhelming percentage of the raw materials—let us say seventy-five to ninety per cent.

Q. How much was it in this case?

A. Well, our material was only six to eight per cent., and we would have had to buy the cellulose, and we would have had to buy a lot of caustic soda. It didn't fit into our picture from the standpoint of a manufacturing enterprise.

Q. Did Dupont have any patents which would have prevented Carbide from going ahead with the manufacture of this film?

A. So far as the manufacture of the film itself was concerned, absolutely none.

Q. Can you tell us, having in mind his Honor's question, what this film was like? I understand it was not a moistureproof film; is that right?

A. Well, neither is ordinary cellophane moistureproof. It was as good as ordinary cellophane and from this distance indistinguishable from it.

8821 Q. As to transparency and feel and other factors of that kind?

A. Not only just as good, but indistinguishable. If you should show me two of the films together I could not tell them apart and I don't believe anybody else could.

Q. Now, it has been charged in this case, Dr. Davidson, that there was some kind of understanding, oral or written, made between Dupont and Carbide under which Carbide agreed that it would not compete with Dupont in the manufacture or sale of cellophane, hydroxyethyl cellulose film, or some other kind of flexible packaging material, if you will——

Mr. MINICUS. May we have——

The COURT. Just a moment. I have lost the question.

Mr. MINICUS. There is no question yet, your Honor.

The COURT. Of course not. You interrupted him.

Mr. MINICUS. I would like to have it re-read. He is telling the witness the Government's position.

The COURT. Read the last question, Mr. Reporter.

(The last question was read by the Reporter.)

The COURT. Is there an objection?

Mr. MINICUS. Yes, sir.

Mr. GESELL. I was going to ask the question directly does he know of any such agreement or understanding.

Mr. MINICUS. I think it is more important before that
8822 stage is reached to get it clear that the Government has never charged any understanding or agreement to that effect between Mr. Davidson's company and the Dupont Company.

The COURT. Is that so?

Mr. GESELL. That is a very encouraging concession. It is not so, your Honor.

Mr. MINICUS. Our position is quite clear on the record as we made it on our case in chief, your Honor.

The COURT. It seems to me if the Government makes that concession we can excuse Dr. Davidson right now.

Mr. GESELL. He neither is a competitor, a potential competitor, and he never was excluded.

The COURT. And he was never a conspirator?

Mr. GESELL. That is right; by a patent agreement, by a commercial agreement, by any kind of understanding.

The COURT. What is the Government's position?

Mr. MINICUS. The Government's position with regard to the Carbide Company is this, your Honor: That the Dupont Company believed that Mr. Davidson's company had a process that would produce a product that was either cellophane or was similar to cellophane; that it would have been competitive with cellophane; and the documents indicate quite clearly that at one early stage Dupont thought it was cellophane, and knowing that, Mr. Lammot duPont and other officials and agents of the Dupont Company went to Mr. Davidson's company and made arguments
8823 and propositions there inclined to discourage this company from entering the business.

The COURT. Under those circumstances I think Mr. Gesell's question is highly proper.

Proceed, Mr. Gesell.

By Mr. GESELL:

Q. Do you have the question in mind, Dr. Davidson?

A. Would you just repeat the question part of it, the last part?

Q. Do you know of any such understanding, arrangement, or agreement?

A. Finish your question.

Mr. GESELL. May I strike it out and start over again?

The COURT. All right.

Mr. GESELL. That is the best way to get at that.

By Mr. GESELL:

Q. Dr. Davidson, do you know of any understanding or arrangement between Dupont and Carbide, written or oral, under which

Carbide and Dupont agreed that they would not compete as to cellophane, as to hydroxyethyl cellulose film, or any other kind of flexible packaging material?

A. Look, for more than thirty years I have been competing with the Dupont Company and I think rather successfully. At no time in my career—and I have been with my corporation about
8824 thirty years—have they ever suggested any such thing or have we ever suggested any such thing with regard to any product; and if anybody in my outfit suggested it they would be fired. We are not interested in picking up any crumbs from the Dupont Company. We respect them, but we think we are as good as they are any day in the week, and perhaps twice as good on Saturdays and Sundays; and I think we have demonstrated it. We have grown in thirty years from an obscure small company to one of the important chemical companies not only in the United States, but in the world. We don't need any favors from anybody.

By the COURT:

Q. In other words, if you had had to do it all over again you would still fall in love with the Union Carbide?

A. You bet your life. I am working for the Union Carbide & Carbon Company for five or six more years, and I think——

Q. Look, Doctor, you have answered the question that there was no agreement, either oral or in writing. Now I want to bring in Mr. Minicus' thought: Were you ever persuaded by Dupont not to compete with them in cellophane?

A. Why, they could not persuade me in that direction. I was a competitor of theirs. I never wanted—how could they persuade me? What could they offer me? We had a very rapidly growing business in a new line of industry that no other chemical company at that time was following. Our future was a lot brighter
8825 than anything they could offer us. What could they possibly say? What could they do? There was nothing that they could have offered us that was as good as our own business.

The COURT. Proceed, Mr. Gesell.

By Mr. GESELL:

Q. Did anybody at any time ever instruct you not to seek to develop this Glyfilm or any other flexible packaging material because of anything related to the Dupont Company?

A. No, sir. I had a free hand.

Q. Did you ever lay off trying to develop it?

A. No, and we still have not, but let me explain that. The man who went up to Madison, Wisconsin, almost twenty years ago, Dr. Broderick, is still in our employ, and he is still working on hydroxyethyl cellulose, but the emphasis is changed. We never

were able to satisfy ourselves or anybody else that it could compete with cellophane economically, but there are other—there are many other uses for it, and we are selling it now in solution form as a sizing agent for textiles and as a thickening agent for emulsions, resin emulsions of different kinds.

Q. By the way, Dr. Davidson, do Dupont and Carbide compete in the sale of flexible packaging materials today?

A. Yes, but not of that particular product. While all this work was going on we began to develop the vinyl resins and I have a lot to do with that, too. We do manufacture through one of our
8826 companies, the Bakelite Company, a flexible sheeting, a vinylite sheeting, which is used for packaging, and in addition to that we sell very large quantities of polyethylene which is used for packaging material also, particularly for deep freeze work.

So, if you will, we are making—answering your question definitely, yes, we do manufacture materials which not only compete with cellophane but are much better than cellophane for certain uses.

Q. Now, there is another charge in this case relating to Carbide, Dr. Davidson. Paragraph 33 of this complaint says by an agreement which was made between Dupont and Carbide in the settlement of two patent interferences relating to vinyl resin coatings Dupont utilized its patents to exclude and suppress Carbide's competition by allotting to itself an exclusive field in cellophane and allotting you an exclusive field in some other line of business.

The COURT. What paragraph is that?

Mr. GESELL. Paragraph 33 (e), and the reference to Carbide, of course, is by the pre-trial specifying these interferences as being initial.

By Mr. GESELL:

Q. What have you got to say about that?

A. Well, aren't you referring to these interferences rather than patents? They had not become patents at that time.

8827 Q. Yes, sir, that is right, I am referring to the interferences on vinyl resin coatings.

A. Again a little background. Our product unmoistureproof was as good and as competitive with Dupont cellophane unmoistureproof. But Dupont was selling a moistureproof material which consisted in putting a layer of wax dispersed in nitrocellulose on the surface of cellophane, and they seemed to have that pretty well sewed up. So we tried to develop a moistureproof coating which was wax dispersed in a vinyl resin in which we were interested, and simultaneously a number of other people

got the same idea, because we were trying to sell vinyl resins to a number of people and, as I recollect, the Sylvania people were mixed up in the interferences and another company known as the Hazel Atlas Glass Company were mixed up in it.

Now, that came at a considerably later time, as I recollect. These interferences arose somewhere along about 1936 and they were not actually settled until about 1938 or 1939. In that period of time we had become convinced there wasn't any very great future for us in hydroxyethyl cellulose sheeting, but a very much more important situation had arisen. At that time the liners in bottle caps were always a little piece of cork. Cork began to get expensive and hard to get, and we developed a liner material which was just a piece of chip board faced with a piece of paper on which was deposited a mixture of vinyl resin and wax, and that
8828 made a very excellent liner material, and we wanted to be sure that we would have a position in that field entirely aside from this hydroxyethyl cellulose.

But about—these four other people had patent applications covering vinyl resins and a wax for moistureproof coating. So this interference dragged on for several years, and was finally settled, and we got out of that what we wanted. We got out of it a right to use these vinly resin wax coatings on fibrous materials as distinguished from non-fibrous materials which would include both cellophane and hydroxyethl cellulose sheeting.

Q. Do you recall, Dr. Davidson, that you signed the agreements settling this interference, Government's Exhibit 2345, which I show you?

A. Yes, I remember the case reasonably well. That is my signature. It is not too clear, but I recognize it.

Q. Did you make any agreement, or understanding or arrangement with Dupont with respect to the subject matter of that interference other than is set forth in the express terms of that written contract?

A. No. It is all there in the contract.

Q. Was there any kind of side understanding or agreement about your competition with Dupont?

A. I never had any side agreements with Dupont. I got all the business that I could without ever implicating either
8829 our company or their company.

Q. Why didn't you take this through the Patent Office? Why did you settle when Dupont told you, as the evidence shows, that it would not settle?

A. We had a pretty good hunch that the moistureproof patent, which was in the name of Clarch, as I recollect, they already had the material out and it had been on the market, although the

patent had not gone through the Office. We had a pretty good hunch that they were ahead of us, and incidentally so did everybody else in that interference insofar as the moistureproofing, that particular moistureproof coating was concerned. We thought they had anticipated us, and if my recollection serves me correctly, one of the interferences did go through the Patent Office and their dates were well ahead of ours.

Q. One final question, Dr. Davidson: Did Carbide to your knowledge at any time that you have been connected with it consider entering upon the manufacture of cellophane?

A. When you say cellophane you mean regenerated cellulose?

Q. Yes, regenerated cellulose.

A. No. That was completely out of our field; we had no interest in it whatsoever.

Q. And you never considered it?

A. We never considered it.

8830 Mr. GESELL. Your witness.

Cross-examination by Mr. ROACHE:

Q. Dr. Davidson, are you a member of the Board of Directors of the Union Carbide & Carbide Company?

A. No, sir.

Q. Do the Board of Directors decide policy matters?

A. I am afraid, sir, that is a rather ambiguous question. I don't know quite what you mean.

Q. When a decision is made to go into a certain field of activity different from what you are in is that not a matter for the Board of Directors?

A. Usually, no. That decision is normally made by the officers of the particular company involved, which is approved by our Executive Committee.

Q. You stated in direct that in 1931 and 1934 you were consulted about the glycol cellulose operations. You did not state that you had any actual decisions made on your own part relative to policy matters.

A. Why, I think I stated this: In 1931 I was General Sales Manager and it was not until 1932 or 1933 that I became Vice President; and I think I stated this: That the Engineering Department—I didn't say officials—the Engineering Department made a survey to see how much the plant would cost; they additionally made a survey to see how much the product
8831 would cost: then in my department we made a survey as to how much we could sell and at what price and what profit we would make if any. Then we got together with the then President of our company, Mr. Rafferty, and we would make a decision that we either would or would not go into the business;

and if we decide to go into the business then we would have to ask the Executive Committee for the money to do it.

Q. Then the Board of Directors had nothing to say about it?

A. Oh, normally on these day to day things the Board of Directors—it didn't come up to the Board of Directors; but if we were going into some completely new field the Board of Directors were kept advised.

Q. That is not a day to day matter, is it?

A. Sir?

Q. That is not a day to day matter, going into a brand new field involving millions of dollars?

A. No, but the Board of directors meets about once every six weeks and they are kept abreast of what is going on.

Incidentally, may I make this clear? Back in those days Carbide & Carbon Chemical Corporation was a subsidiary of the Union Carbide, and it had its own Board of Directors, and I was—or rather I became one of the Directors of the Carbide & Carbon Chemical Corporation as distinguished from
8832 Union Carbide & Carbon.

Q. When was that?

A. I think I was a Director of that company along about 1932 or 1933; in there some place.

Q. Did the Union Carbide & Carbon Company sell very much material to the Dupont Company?

A. Not until the Chemicals Company got rolling, they didn't sell a very great deal, no, not as I recollect.

Q. Are you in a position to know?

A. I am as of recent years.

Q. But you weren't then?

A. I can make a pretty good guess.

Q. You are guessing now?

A. Yes, but a good one.

Q. What about Mr. Barrett? Would he know?

A. He was an officer and director of Union Carbide.

Q. Would he know?

A. I should think so.

Q. Where is Mr. Barrett today?

A. I don't know. I saw him about two weeks ago in New York. He is not connected with the corporation.

Q. He has offices in New York, does he not?

A. I can't answer that question. He is not in business.

Q. Were you present at the meeting that took place
8833 between Lammot duPont and Mr. Jesse Ricks and Mr. Barrett of the Union Carbide & Carbon Company on December 2, 1931 at which they discussed Carbide's proposed entry into the cellophane field?

A. If there was such a meeting I was not present.

Q. There is evidence in this case that there was such a meeting and that Mr. Ricks and Mr. Barrett were present. You were not present?

A. No, sir.

Q. You don't know what was discussed at that meeting relative to your entry into the cellophane field?

A. No, sir.

Q. Mr. Barrett was present. Mr. Barrett is available, is he not?

A. I don't know.

Q. You saw him in New York a couple of weeks ago?

A. Yes, about two weeks ago.

Q. Your company never did go into the manufacture of this product, glycol cellulose?

A. In the form of sheeting.

Q. Commercially?

A. No, we never did in the form of sheeting.

Q. Here are some samples, Dr. Davidson, of cellophane in its various types indicated right on there. Would that look like glycol cellulose to you?

A. Yes, sir.

8834 Mr. GESELL. Barrett.

The COURT. Identify him for me, please.

Mr. ROACHE. He is the other gentleman who is still alive that was at that conference.

Mr. GESELL. I think we might answer your Honor's question to identify him.

By Mr. GESELL:

Q. Do you recall what his position was with Union Carbide & Carbon Corporation on December 2, 1931?

A. He was Vice President of the Union Carbide & Carbon Company.

Q. What was Mr. Ricks' position at that time?

A. He was President.

Q. Did either of these gentlemen, Mr. Barrett, or Mr. Ricks, give you any instructions at any time not to go forward with any of your plans or any of your programs for the development of this Glyfilm?

A. Never at any time, and that should be obvious, because we continued for at least six years strenuously endeavoring to sell the process to somebody.

Mr. GESELL. That is all.

By The Court:

Q. If those two gentlemen had entered into any agreement whether orally or in writing, or had been persuaded by Dupont not to go into competition, would you have gotten wind
8835 of it?

A. I not only would have gotten wind of it, I would have had to be told, because, after all, I was the man on the firing line. I was trying to sell the project. Somebody would have had to call me off.

By Mr. Gesell:

Q. And nobody did?

A. Nobody not only did, but far from it. I was encouraged to go ahead. In fact, I was criticized for not doing a better job than I did.

Mr. Gesell. That is all, your Honor.

The Court. You are excused, Dr. Davidson.

The next step is Atlantic City?

Mr. Gesell. Yes.

The Court. Recess to tomorrow morning at 10 o'clock.

(At this point the trial was adjourned to Friday, April 4, 1952, at 10 o'clock, a. m.)

8836 Friday, April 4, 1952, 10:00 O'clock, A. M.

Present: As before noted.

R. R. Smith (resumed).

DIRECT EXAMINATION (CONT.)

Mr. Gesell. Your Honor, I have a very few remaining questions on Mr. Smith's direct examination.

By Mr. Gesell:

Q. When you were last on the stand, Mr. Smith, we were discussing Dupont's alleged power to control supply, and I want to ask you in that connection what was the effect from your experience on Dupont's ability to compete at those times when it was unable to supply to the full extent of its customers' requirements?

A. Well, our ability to compete was severely hampered.

Q. In what respect?

A. A short supply situation gives competitive materials the opportunity to make inroads that normally might take them a considerable amount of time to do. They are able to gain position with large pieces of business from which you either have a

tremendous job of displacement or you may never get them back; and strictly from the sales point of view I see nothing good that has ever come from shortage for Dupont.

8837 Q. Have you ever heard suggested by anyone in Dupont that it would be desirable or advantageous purposely to create a shortage situation?

A. I most certainly have not.

Q. Paragraph 22 (e) of the complaint alleges that Dupont has the power to restrain free and open competition at the distribution level of the industry by imposing unlawful terms and conditions upon domestic buyers who, lacking adequate alternative sources of supply, were constrained to comply therewith. Is it your testimony that free and open competition at the distribution level of the flexible packaging materials markets exists?

A. I have never known anything else but free and open competition in that field.

Q. Is it your experience that Dupont has any power to prevent or restrain that competition?

A. It certainly has not been my experience.

Q. It is also alleged in the complaint, Mr. Smith, that cellophane is used primarily for wrapping cigarettes, food stuffs, and other consumer goods, and that the characteristics of cellophane render it unique for its particular purposes. From your experience what do you say as to the charge that the characteristics of cellophane render it unique for its particular purposes?

A. I know nothing that is unique about cellophane.

Mr. Gesell. Your witness.

8838 Cross-examination by Mr. Rennsner:

Q. Mr. Smith, I believe you stated that Dupont does not at the present time have any discounts that it allows to direct users: is that true?

A. That is correct.

Q. That is the case today?

A. Yes, that is so.

Q. Has that always been the case?

A. No, it has not.

Q. Is it not true that Dupont had a quantity discount ranging as high as 10% which it granted to direct users from the very early days until January 1, 1947?

A. Yes, I believe that is so.

Q. Is it not true that this quantity discount to direct users was based upon the quantity purchased and that the larger the quantity purchased by a direct user the greater the discount he would receive?

A. Yes, that is true.

Q. Mr. Smith, I believe you stated also that Dupont does not at *the present time* have any discounts that it grants to jobbers?

A. That is correct.

Q. Has that always been the case?

A. It has, to the best of my knowledge.

8839 Q. Is it not true that Dupont also granted a quantity discount to jobbers from the very early days until January 1, 1947?

A. Yes, I believe they did, a quantity discount.

Q. And here also is it not true that this quantity discount to jobbers was based on the quantity purchased and that the larger the amount purchased by a jobber the greater the discount would be that he would receive?

A. Yes, I believe that is so.

Q. And were not these quantity discounts computed at the end of the year? That is, cumulated at the end of the year?

A. I believe not at the end of the calendar year. I believe they were at the end of the fiscal period.

Q. At the end of the particular contract year that each converter had?

A. I believe that is so.

Q. Or each converted user had?

A. I believe that is correct.

Q. Mr. Smith, what is your definition of a converter?

A. Well now, we have a definition of a converter that is clearly stated, and I don't know whether I can actually repeat that word for word.

Q. Well, to the best of your ability, Mr. Smith, will you give me your definition of what a converter is?

A. Yes, I will give it to you to the best of my ability.

8840 We classify,—and I believe I am correct in this,—a converter who engages in one of a number of different converting operations with cellophane and produces a product which is a primary part of the package, either the package itself or a primary part of it.

Q. Would printing on cellophane be a converting activity?

A. Yes, it would.

Q. Would bag making be a converting activity?

A. Yes, it would.

Q. Would laminating to a carton of one type or another be considered a converting activity?

A. I believe so, in the scope of that definition.

Q. Would the manufacture of tear tape be considered a converting activity?

A. I am not certain of that. I would have to check. I think not.

Q. Why would it not be a converting activity?

A. Well, if it is not, and I am not certain of it, it would simply be because it does not fall within the scope of our definition of a converting.

Q. That is, it has to fall within the scope of your definition of what is converting and what is not converting; is that correct?

A. That is true, yes, sir.

Q. Would the making of Christmas tree ornaments and
8841 tinsel and that sort of thing be considered a converting activity?

A. No, we do not consider it so.

Q. What is the reason why such an activity would not be considered a converting activity?

A Simply because, as far as my understanding of this goes, the manufacture of an item of that kind is not made as in what we call an integral part of the package for resale.

Q. In other words, to be a converter you have to do something that will lead to the formation of a package?

A. Primarily.

Q. I believe you also stated that the discount to converters at the present time is 7%; is that true?

A. That is true; yes, sir.

Q. Has this always been the case?

A. No, it has not.

Q. Is it not true that prior to 1939 all converters also received a quantity discount on their purchases of Dupont cellophane?

A. I don't want to speak with any authority prior to 1939, because at that time, Mr. Renninger, my work, my entire activity, was in the field; I was not part of sales management; and I frankly do not feel qualified to talk about 1939 in relationship to converter activities.

Q. But do you know what type of discount they received?

8842 A. Prior to 1939?

Q. Yes.

A. I wouldn't want to say; no.

Q. Well, after 1939 do you know what quantity discount or what type of discount a converter received?

A. For certain I don't know, no.

Q. Well, do you know whether at any time prior to the present time a converter received a different discount or a different type of discount than the converter at the present time receives?

A. Yes, I believe there was,—there was a 7-½% discount at one time.

Q. Do you know whether there was a 10% discount at one time?

A. I do not want to state for certain on that.

Q. Do you know whether a converter at any time ever received an advertising allowance based upon his purchases?

A. I have understood that they have, but I do not know it to be so.

Q. Do you know the difference between a regular converter and a promotional converter?

A. Now I am going to have to go back, in answering that question, Mr. Renninger, to the only experience that I had with the so-called regular or promotional converter, and that is from the standpoint of field activity. When I was in the field, it was
8843 my understanding that a promotional converter was a 100% user of Dupont film, and that a regular converter was not; and that is the extent of my understanding from the field operation.

8844 Q. Do you know whether there were quite a number of promotional converters at one time or not?

A. Actually I don't know, sir, how many promotional converters there were.

Q. Do you know whether or not the leading converters were not all promotional converters at one time?

A. Actually I don't know.

Q. Do you know what the advantage would be for a converter to become a promotional converter over a regular converter?

A. I have never read those converter contracts or agreements, Mr. Renninger, because by the time I came into the sales management there weren't any, so I can't answer that.

Q. Do you know whether or not Shellmar was a promotional converter of Dupont's?

A. Yes, I believe they were.

Q. Do you know whether Traver was a promotional converter of Dupont?

A. I can't be certain of this; I think so.

Q. Do you know whether Milprint was a promotional converter of Dupont's?

A. I believe they were, yes, sir.

Q. Do you know whether Dobeckmun was a promotional converter of Dupont's?

8845 A. Yes, I believe they were.

Q. Mr. Smith, do you know what is the difference between a converter and a fabricator?

A. Only in the definition as has been set down which I have discussed with you just a moment ago. We classify generally—and I am speaking now purely from memory of this definition of

converting and fabricating—we classify generally a fabricator who makes an item for re-sale that is not the integral part of the package.

Q. In other words, the distinction is whether it goes into a package or not?

A. Primarily I believe that is correct.

Q. A fabricator works on cellophane, does he not?

A. Yes, sir.

Q. He may cut it up to a certain extent in a similar operation as a converter would do?

A. Well, now, I don't know quite what you mean by that, sir.

Q. Well, normally there is a slitting or cutting operation in a fabricator's activities as well as with a converter's activities; is that not true?

A. I don't know whether there will be a slitting operation or not, sir. They may buy sheets or rather rolls cut to specific sizes for their purpose. I really frankly can't answer that as a general proposition.

8846 Q. Do you know the distinction between a fabricator and an industrial user?

A. At what period are you speaking of, Mr. Renninger?

Q. Say during the period of 1942, 1944, or 1945, in that period.

A. No, I can't give you that distinction, sir.

Q. What is the difference between a jobber and an agent?

A. You mean what was the difference?

Q. Yes.

A. At the time we had agents an agent would handle cellophane, sell cellophane to the same type of end user that we would call on ourselves. The jobber would buy cellophane and re-sell it to the type of user on whom neither we nor the agent generally called, which was the small retail store primarily.

Q. Did agents have Dupont price lists or price lists of their own?

A. I can't answer that from specific knowledge, sir.

Q. Do you know whether the agents followed the Dupont prices?

A. I believe they did.

Q. What discount did the agents receive, if any?

A. I actually cannot answer that question, Mr. Renninger.

Q. Who were the Dupont so-called agents prior to 1947?

8847 A. I believe there were three. I think one is the H. D. Catty Company, the other was the Brooks Paper Company, and I believe the third was the Zellerbach Paper Company.

Q. I believe you stated that they called on the same class of trade that the direct sales department of Dupont called on?

A. That is correct, sir, among others, but they also called on that class of trade.

Q. What would happen in a case where a Dupont agent was selling a large customer and that customer would, say, prefer to buy its cellophane direct from Dupont?

A. What would happen in that case?

Q. Yes. Would Dupont take over the account?

A. That did happen in one of my experience, and, yes, we did.

Q. Why would that be done?

A. In that particular case I am speaking of, and it was the E. J. Brach Company in Chicago, the E. J. Brach Company felt that as one of the largest users of cellophane in the candy field that they preferred to buy direct because of their services, and they had expressed at that time a considerable amount of dissatisfaction with the services that they were receiving from H. D. Catty Company, and I was informed by the Director of Purchases of the E. J. Brach Company that they insisted upon buying
8848 from us or they were going to buy from Sylvania.

As soon as that became perfectly clear what they intended to do, I can recall distinctly sitting down with the Chicago manager of H. D. Catty and Mr. Catty himself, discussing this entire situation, and pointed out to them that we were going to do everything we possibly could not to take that business, but we wanted them to know what the situation was and we wanted them to have every opportunity to protect themselves; but if they could not, we saw no choice in the matter, because we did not want to see Sylvania get it.

Q. Mr. Smith, I presume that Catty was selling to Brach Dupont cellophane at the same price that you yourselves would have charged Brach?

A. That is correct, sir.

Q. There was no price advantage to Brach in changing from Catty to yourself?

A. No, sir.

Q. In other words, did Catty also grant the Brach Company a quantity discount at that time?

A. I believe they did.

Q. The same quantity discount that Dupont also granted?

A. I believe they did, yes, sir.

Q. In later years I believe that Dupont eventually took over all the large accounts of the service by the so-called agents: is that not true?

8849 A. Yes, I believe so.

Q. And the agents then had to change their activities to that of a converting function: is that not true?

A. Primarily I think that is correct, sir.

Q. Turning back again to a converter, in your estimation about how much cellophane would a prospective converter need to ade-

quately do business and make a reasonable profit in converting cellophane?

Mr. GESELL. As of what time, if your Honor please? I object to the question as being indefinite.

The COURT. Make it more precise, Mr. Renninger.

By Mr. RENNINGER:

Q. Well, 1945?

A. I would not even attempt to guess.

8850 Q. Would you have any idea? Would it be a large amount? Would it be a thousand pounds?

A. Mr. Renninger, I have to say to you again, I wouldn't even attempt to guess.

Q. I believe your activities have mainly been in the direct sales field; is that true?

A. Primarily, yes. Up to 1948, that is true.

Q. Mr. Smith, you have described in great detail Dupont's attempts to enter the white and variety bread markets in the Pittsburgh area from 1934 through 1936. Is that not true?

A. Yes, sir.

Q. What were the products used at that time for the wrapping of breads in the baking industry?

A. You are speaking of materials?

Q. Yes, sir.

A. They were wax paper and glassine.

Q. You were then attempting to displace wax paper and glassine with cellophane in the break market?

A. That is correct.

Q. In other words, with a comparatively new product you were attempting to enter a market already served by other wrappers; is that not true?

A. We were attempting to sell cellophane for bread.

Q. I believe you also stated that the principal obstacle to

8851 selling cellophane for bread, for white bread, was cost; is that not true?

A. That was the principal obstacle; yes, sir.

Q. And I think you also stated that at that time cellophane cost from three to five times more than wax paper and from two and a half to four times the cost of glassine?

A. I believe I did say that; yes, sir.

Q. And that many bakers said that their profit on the sale of white bread was not as much as the difference between the cost of cellophane and wax paper?

A. That is correct, sir.

Q. If that is the case, Mr. Smith, how could white bread be considered as being in the cellophane market?

A. For the same reason that any product could be considered in the cellophane market if cellophane could be used on it and a profit shown to the user.

Q. Here Dupont was attempting to enter a new market with a comparatively high priced item, cellophane, that is, as compared to wax paper and glassine.

Mr. GESELL. I don't think the witness thinks that is a question.

The WITNESS. Is that a question, sir?

Mr. RENNINGER. Yes.

The WITNESS. Would you repeat it, please? I am just a little confused.

Mr. RENNINGER. Please repeat it, Mr. Reporter.

(The question was repeated by the reporter.)

8852 The COURT. I don't see any question mark in that question.

The WITNESS. Well, if that is a question, sir, I will say yes, we were.

By Mr. RENNINGER:

Q. In the early years when Dupont attempted to enter the bread market, did you consider wax paper and glassine to be your potential competitors in that market?

A. We considered them to be our actual competitors.

Q. I believe you stated that your definition of competition was, and I quote, that "Where I try to sell my product and I am prevented from selling it by the activity of another material, I consider that material to be a competitor of mine." Is that your definition of competition?

A. That is rather a narrow definition. I didn't extend it, but I will, to this extent, that after I have succeeded, if he succeeds in getting it back, that reassures me that that is my competition.

Q. This definition of yours would also apply when you are attempting to enter an entirely new market, would it not? Or would it?

A. Perhaps I can answer that this way, Mr. Renninger. In our sale of cellophane over the years we have tried to sell it wherever we thought a logical application could be made, and in
8853 the process of that effort we met the competition of a great many different materials in many different kinds of industries, materials we considered to be competitive.

Q. Well, let us take peanuts as an example. I believe quite a number of peanuts are put up in cellophane; is that true?

A. Yes, sir; that is true.

Q. They are also put up in glass jars, are they not?

A. Yes.

Q. They are also put up in tin cans, are they not?

A. Yes.

Q. Do you consider then that tin cans and glass jars are in competition with cellophane?

A. To a certain extent, we certainly do.

Q. Do you feel that cellophane is in competition with cardboard containers and boxes?

A. In many cases, yes.

Q. These materials, though, are not in the flexible package materials market, are they?

A. Would you clarify a point for me, Mr. Renninger? I have always been confused by that word market. What do you mean, sir, by market?

Q. Mr. Smith, that is a definition or a term that has been used by the defendants all through this case. That is something that I myself am trying to find out. It is an issue raised by them, not myself.

The COURT. I don't see that we are going to get
8854 very far if neither the counsel nor the witness knows what the term means.

The WITNESS. Let me clarify it.

The COURT. It is entirely irrational. He asks what market is, and the witness says I don't know what you mean; what do you mean by market? And counsel says, I don't know; it is whatever you mean.

Mr. MINICUS. The witness has insisted upon using the word competition, in competing with other things, your Honor. He must be competing in a market. He can't compete outside of a market.

The COURT. What is your definition of a market?

Mr. MINICUS. My definition of a market? All right. My definition of a market, your Honor, is an economic sphere in which buyers and sellers are participating in the exchange of goods to satisfy particular demands as judged by consumer preference for a particular commodity.

The COURT. Now that Mr. Minicus has made his legal definition, we will abide by it, and you may pursue your examination with that in mind.

Mr. GESELL. Assuming the witness understands it.

The WITNESS. Yes.

The COURT. Well, let him make his best effort. Let us get on with the examination. That is a good definition.

8855 Mr. MINICUS. I think it is too, but I don't think it is the definition that the defendants are talking about here. It is their definition we are trying to get at, and that is what Mr. Renninger is trying to find out.

The COURT. Mr. Reporter, will you pick up the last question and read it?

(Question and answer of the witness repeated by the reporter, as follows:)

"Q. These materials, though, are not in the flexible package materials market, are they?

"A. Would you clarify a point for me, Mr. Renninger? I have always been confused by that word market. What do you mean, sir, by market?")

The COURT. Will you make your best efforts to answer?

The WITNESS. I will try, sir. I think I am going to have to answer you this way, Mr. Renninger, and see if it satisfies you. In our attempts to sell cellophane, we have tried to sell it for a large number of end uses, and in the process of trying to sell it for those large number of end uses we have met the competition of a great many materials, most of which have been in the classification of what are called flexible packaging materials.

By Mr. RENNINGER:

Q. Do you consider, Mr. Smith, two articles that are quite different in price to be in competition with one another?

A. It depends on what two articles they are, sir.

8856 Q. Then there is something more than the element of price in your definition of competition?

A. Oh, yes.

Q. What in your conception are the elements of competition?

A. Well, are you speaking now in relationship to the broad field of competition, or are you speaking in relationship to the fields in which cellophane competes?

8857 Q. Well, you defined competition, I believe, Mr. Smith, as "When I try to sell my product and I am prevented from selling it by the activity of another material I consider that material to be a competitor of mine."

A. I broadened it a little bit, did I not?

Q. Yes, I believe you did.

A. What is your question?

Q. You talked about various elements of competition. I asked you, Mr. Smith, what in your estimation are the various elements of competition?

A. In the packaging field I think that you have to take the point of view—and we always have—whether or not other materials have I don't know—but we have always taken the point of view that a packaging material must answer some problem of the user. It must be used in such a way as to satisfy a problem and return a profit. Now, within the scope of that broad element there are

a great many things. None of them in my opinion can be treated by throwing a blanket over them, and I am sorry that I cannot do it that way.

Mr. MINICUS. May I have a moment, your Honor, to consult with Mr. Renninger?

The COURT. Certainly.

Mr. MINICUS. Thank you, your Honor.

By Mr. RENNINGER:

Q. In other words, Mr. Smith, cost may be an element
8858 of competition, and I believe you also said that consumer preference——

A. No, I didn't say that.

Q. You are talking about the particular end use involved.

A. I don't think I said consumer preference. I said the variety of problems that might be associated with their packaging problem.

Q. That is for a particular end use a certain particular product may be preferable over another product: is that not true?

A. In the opinion of the buyer.

Q. In other words, it depends on the opinion of the buyer?

A. Entirely.

Q. So is that not consumer preference?

A. Are you using "consumer" in the sense of the buyer of material for use or the consumer as the average consumer that buys materials at retail?

Q. I think there are probably two different preferences there. You have, do you not, the preference of the packager, the man who packages his products in a particular wrapper; is that not true?

A. Yes, sir, but which one are you referring to, sir?

Q. The man who wraps an article has certain standards
8859 or qualifications that he feels are necessary in the wrapping of an article; is that not true?

A. Well, standards, I don't know. I think if you are going to treat it that broadly, sir, I think that you must say that the user of a packaging material for the packaging of a product uses at any one time the material that he thinks is best for his purpose at that particular time.

Q. Yes. And one of the considerations may also be the preference of the buying public for a particular wrapping material; is that not true?

A. I think that would enter into the consideration of many buyers, yes.

Q. Some users may want a certain type of protection; is that not true?

A. Yes, that is true.

Q. Another type of user may want transparency, complete transparency; is that not true?

A. I have never known any user who only wanted transparency.

Q. It is a number of factors, isn't it?

A. It is a composite of qualities that go into the making up of the package and the preference for the package and the use for the package.

Q. In other words, what is used by a particular manufacturer in the wrapping of his product depends upon
8860 the end use that that product is to be used for?

Mr. GESELL. I don't understand that question, your Honor. I object to it.

By the COURT:

Q. Do you understand the question, Mr. Smith?

A. Would you repeat it again?

(The last question was read by the Reporter.)

Mr. GESELL. I don't understand it.

A. (Continuing.) The end use for which it is to be used for? You mean on the product he is packaging? Is that what you mean, Mr. Renninger?

By Mr. RENNINGER:

Q. Yes.

A. Yes, that is true.

Q. Is it not true that in many instances a particular packager might insist upon transparency? Is that not true?

A. Are you speaking now of transparency alone?

Q. Assuming that a particular wrapper is similar or has basically the same characteristics as another wrapper, if one is transparent and another one is not transparent are there not many users who insist upon the transparency?

A. I can only answer your question this way: Yes, while they are buying that particular type of material if they want it, of course, they get it.

Q. And is it consumer preference where that——

8861 A. Consumer preference, you mean the user of the material, sir? The packager you are speaking of now? The word "consumer" I don't think—do you mean the user?

Q. I think, Mr. Smith, it is more a combination, as I stated before, of not only the packager, but the impulse on the packager by the consuming public.

Mr. GESELL. I don't understand that, your Honor.

A. I don't get that.

Mr. GESELL. If he wants to say that when he uses "consumer" he means the housewife or the packager we can go ahead on that basis.

The COURT. Let us get straightened out.

By Mr. RENNINGER:

Q. Let us consider the housewife.

A. What shall we consider about the housewife?

Q. The wrapper used on an article depends to a great extent upon the consumer preference; that is, the preference of the buying public? Let us put it that way.

Mr. GESELL. That is not a question, your Honor.

A. If it is a question I would say no, I would not say so. The packaging material, Mr. Renninger, that a manufacturer uses is used because of the multiplicity of factors that are engaged—that comprise his problem. He thinks that is the best thing for him to use at the time he is using it. That is the only way I can answer that question.

8862 By Mr. RENNINGER:

Q. Mr. Smith, do you consider P. T. cellophane to be in competition with M. T. cellophane?

A. They are used for greatly different purposes.

Q. But do you consider them in competition?

A. They compete in different areas, sir.

Q. Mr. Smith, it is perfectly all right to explain what you mean, but I would like to have you answer the question yes or no and then you can explain it any way you feel fit. I am asking you do you feel that M. T. cellophane competes with P. T. cellophane?

A. Not for the same purposes, no, I don't.

Q. Mr. Smith, let us assume that you were selling dresses, say, in the medium price field. Would you feel that those dresses were in competition with dresses in the low price field?

Mr. GESELL. I object to that, your Honor. He is not qualified on women's dresses. He is an expert on the packaging market.

Mr. RENNINGER. I am trying to develop his conception of the word "competition", your Honor.

Mr. MINICUS. He seems to have testified as an expert on competition. I think Mr. Renninger is quite correct on that, your Honor. He has used the word "competition" very freely
8863 through this case, and I think we have a right to know what his general concept of competition is.

The COURT. All right. Your objection is overruled, Mr. Gesell. Read the last question.

(The last question was read by the Reporter as follows:)

"Question: Mr. Smith, let us assume that you were selling dresses, say, in the medium price field. Would you feel that those dresses were in competition with dresses in the low price field?

A. I am not even going to try to answer that question. I would not ask a dress manufacturer to come in here and tell me what my film is in competition with. I can't answer that question, Mr. Renninger.

By the Court:

Q. In other words, your are not an economic theorist?

A. That is correct.

Q. You just know your competition?

A. I have run into competition, what I call competition in the selling of my product and I prefer to stick to that sphere. That is what I know.

By Mr. Renninger:

Q. Getting back to the question of price competition, Mr. Smith, let us assume for a minute that pliofilm was selling for $10 a
8864 pound and cellophane was selling for 50c a pound. Would you consider that they were in competition?

A. Well, now, if you really want me to answer that question, Mr. Renninger, I will say I doubt it very much.

Q. Well, assuming——

The Court. Is that an actual fact or a theoretical question?

Mr. Renninger. Just a theoretical question, your Honor.

Mr. Gesell. It bears no relation to the facts.

The Witness. I have to give Mr. Renninger a theoretical answer.

The Court. Let us stop this business. I don't want to sit here and listen to the theories of the respective parties. I want to get the facts of this case.

Mr. Renninger. I am trying to develop a little more his own ideas and theories on competition.

The Court. All right, I will be patient with you for ten more minutes on that line, but after that you have to get to the facts.

By Mr. Renninger:

Q. In your opinion, Mr. Smith, if there are substitutes in any market would it be possible for one company to have a monopoly of one of the products in the over-all market?

Mr. Gesell. I must object to that, your Honor.

A. I don't know what you mean by "monopoly."

8865 Mr. Gesell. It calls for a legal conclusion. The witness is not qualified as a lawyer. It does not define what he means by "substitutes" and I don't know whether his definition of the market is clearly established or not.

(The last question was read by the Reporter as follows:)

"Question: In your opinion, Mr. Smith, if there are substitutes in any market would it be possible for one company to have a monopoly of one of the products in the overall market?"

The COURT. Objection sustained. Make it more definite, Mr. Renninger.

By Mr. RENNINGER:

Q. Do you feel that there could be any market in which there would not be substitutes available?

Mr. GESELL. I object. Is that cellophane or what is he talking about? What is a substitute?

The COURT. Objection sustained.

By Mr. RENNINGER:

Q. Going back to the use of a particular wrapper on a product, the wrapper has to serve some particular function or functions; is that not true?

A. Yes, it does.

Q. And that for a certain end use a certain product may or may not be used?

8866 A. You mean a certain packaging material may or may not be used?

Q. Yes.

A. Yes, that is correct; at the time it is being used that way.

8867 Q. One wrapper may be used on one produce and not on another?

A. You mean by one manufacturer?

Q. Let us put it this way. One manufacturer, because of certain inherent qualities in that particular wrapper, may require a certain type of wrapper, where other manufacturers requiring other characteristics in the wrapper might require another type of wrapper; is that not true?

A. I have to answer you this way, Mr. Renninger,—the word characteristics—I don't want to seem to quibble, but you will find that each manufacturer will use on his produce what he thinks is best in relationship to what he thinks his problem is; and I can't answer that any other way.

Q. Well, Mr. Smith, perhaps we can get a little closer down to what I have in mind. Did you around January of 1951 prepare an outline of a presentation that was to be made at a particular meeting relating to the market for Dupont films?

A. Yes, I did, sir.

Q. What was that outline prepared for?

A. That outline,—I hope we are talking about the same thing.

Q. Perhaps I can show you this document.

A. I would like to see it.

Mr. RENNINGER. I would like to have this particular document marked as Government Exhibit 6001 for identification.

8868 (The document was marked "Plaintiff's Exhibit 6001" for identification.)

The WITNESS. Yes, that is correct.

By Mr. RENNINGER:

Q. What was this outline prepared for?

A. That outline was prepared for a presentation which the film department was preparing to make to the Executive Committee of the Dupont Company outlining what they thought could be a tentative position of their products over the next eight to ten years.

Q. Did you prepare this complete outline, Mr. Smith?

A. Yes, I think I can say that I did almost do that entire job; yes, sir.

Q. And you believe that the statements contained in there are true and correct, do you?

A. I know what I meant by them.

Q. Do you feel that the statements here are true and correct as contained in this document?

A. They are true and correct as I made them.

Q. I believe the beginning of this outline reads as follows, "The purpose of the presentation, to show the overall potential market for films based on our concept of logical applications whereby non-overlapping markets exist for different films based on functional differences and price, to show the potential markets

8869 for Dupont films on this basis." Is that——

A. Are you reading that?

Q. Yes, sir.

A. That sounds like I said it.

Q. And you subscribe to that statement?

A. Yes, sir; I most certainly do.

Q. The next item there is, "To show Dupont's present position in the film industry and large unsold potential. (c) To demonstrate the penetration of specific markets to date and the functional differences in films required to effect this penetration."

A. Yes.

Q. "(d) To forecast Dupont's 1955 film position with particular reference to opportunities for Polythene and V film in markets not considered cellophane potential or cellophane competition."

A. Yes.

Mr. GESELL. I don't mind his reading this into the record, but I don't know what the yesses mean. What are you doing?

The WITNESS. I agree that he is reading correctly.

By Mr RENNINGER:

Q. You subscribe to the statements contained therein?

A. I made those statements; that is correct.

Q. And you subscribe to these statements?

8870 A. As I meant them, I subscribe to them.

Q. A little later in this document, Mr. Smith, you describe a chart, a chart to show the potential for all Dupont films, and each individually broken down into industry classifications. "The following will be brought out from these charts:

(a) How potentials are established based on nature of end use, functional characteristics and price, that as a result potentials are not considered overlapping and films are essentially non-competitive, as their markets are fields where individual films can best compete. Some borderline competition on certain end uses will exist, but our safety factor is large unsold potential and our ability to direct and control sales effort along produce lines."

A. Yes, that is correct. I said that.

Q. And you subscribe to that statement, Mr. Smith?

A. I subscribe to that statement, to Dupont films.

Q. Mr. Smith, I believe that you stated that before you could go into the white bread field you had to defeat the cost angle, and to do this you had to make a complete study of every baker's business, as well as the baker's cost of production, his distribution, his stale returns; is this true?

A. That was the approach we had to make: yes, sir.

Q. In other words, to extend the field of uses for cellophane it was necessary to overcome the obstacles in that par-

8871 particular field?

A. Yes; that is correct.

Q. In the specific white bread field, I believe you stated that you were able to sell the Gartmann Baking Company of Latrobe, Pennsylvania, by riding their bakery trucks and finding a great many stale returns, because a loaf of bread came open when wrapped in wax paper. Was that true? Is that correct?

A. That was the basis on which we got started; that is true.

Q. To develop that thought a little further, Mr. Smith, you mean that a loaf of bread wrapped in cellophane would not come open as readily as a loaf of bread wrapped in wax paper?

A. Not on that machine.

Q. Well then, how were you able to sell cellophane to this particular baker?

A. Because, Mr. Renninger, he was taking in an exceedingly high stale return, which in the baking industry is a guaranteed sale; he was taking a considerable loss, for the simple reason that the loaves were going out to the store, being broken open

by the squeezing action of the housewife, coming back to his bakery stale, and he was selling it for a penny a pound or giving it away. Now if they had stayed but there and the consumer had purchased it, he wouldn't have had that loss. So from the practical standpoint of approaching Mr. Gartmann,
8872 naturally I said, here is one way of cutting down the cost on improved packaging. Now what else I said to him at the moment I can't recall. It has been so long ago. But that was the basis upon which we started to work with Gartmann.

Q. Well then, he went to cellophane just as a favor to you, for pointing out the opening of the package, or what?

A. As a favor? Anybody that does——

Q. I don't understand. If you say that cellophane did not seal as well as wax paper, and that it is——

A. Oh, I said just the contrary.

Q. The stale return——

A. I said just the contrary. The cellophane sealed better than wax paper.

Q. Oh, I beg your pardon. I understood you to say that cellophane did not seal better.

A. Just the reverse.

Q. Oh. So that was one of the factors then, the fact that cellophane would seal better than wax paper?

A. On that particular bakery. That was his problem.

Q. In another instance I believe that you were able to sell the Greiner Baking Company, of Indiana, Pennsylvania, by persuading the baker to limit his sales within a radius of 50 miles rather than 65 miles?

A. Yes, that is correct.

Q. Did the use of cellophane increase this baker's sales?

8873 A. I can't remember whether they did or not, but the net result was that he used cellophane and he continued to use it for quite some time, so he must have felt that he was getting his money's worth. It is a simple matter of arithmetic, when you add up the profit and loss statement.

Q. In other words, he was able to sell within the 50 mile radius what he had previously sold in the 65 mile radius?

A. Yes; it is just a difference in distribution of product, that's all.

Q. What characteristic of cellophane do you attribute this to?

A. Oh, it was not entirely a characteristic of cellophane in this particular situation. In the case of the Greiner Baking Company, for example, I had been able to find out that his products generally had not been too well accepted closer to his bakery; so on the program of improved packaging I induced him to go out

and try to get introduction of a new type of package closer to his bakery. And all I can tell you is that he was successful.

Q. In what way do you feel, Mr. Smith, that he was able to sell his bread more effectively in cellophane than he was in wax paper? There must have been some characteristic of cellophane, something in the use of cellophane, that would cause this; must there not?

A. He had a very satisfactory sale before. Very satis-
8874 factory sale. As a matter of fact, Greiner was not interested in higher sales, but his costs of distribution were killing him. So whether or not he sold more, Mr. Renninger, closer to his bakery, or not, I don't know, but if he had sold as much as operated within a 50 mile radius instead of a 65 mile radius, the difference in his transportation cost would have practically wiped that out, because they were terrific.

Q. Well, why did he buy cellophane?

A. He bought cellophane for the simple reason that I was able to induce him as to the value of its use, and naturally when he used it, if he got his results, he kept on, and if he didn't, he quit.

Q. With reference to the Liberty Baking Company, I think you also stated that the company was able to increase its white bread sales 15% by the use of cellophane?

A. As I recall it, yes, that is true.

Q. Well, there, what was a quality or characteristic of cellophane that caused it to increase this baker's sales?

A. Well, it evidently was a very good package.

Q. Was it different from the package he had before?

A. Yes, it was different.

Q. In what way was it different?

A. Why, one was cellophane and the other was wax. Mr. Renninger, if you want me to say that it was transparent,
8875 I will say that it was transparent, I will say that it was transparent.

Q. No.

A. They could see the bread.

Q. Do you consider that that is a good sales field,—sales argument?

A. All my life, I have vigorously sold the value of transparency as an integral feature of our product, wherever I possibly could.

Q. I believe you also stated that when the price of bread declined or the cost of the materials went up, the use of cellophane was practically eliminated from the white bread field; is that true?

A. I don't think I quite said that, no.

Q. Well, let me put it this way, Mr. Smith, and correct me if I am wrong. I think you gave as an example of this generally

that early in 1936 almost every baker in Northwestern Pennsylvania stopped using cellophane for the wrapping of bread because the price of flour went up 50 to 60 cents a barrel?

A. That's right.

Q. That was due to factors within the bread industry itself, was it not?

A. That is right.

Mr. GESELL. Or the flour industry.

8876 By Mr. RENNINGER:

Q. In other words, certain factors in the particular industry took the product out of the cellophane market and put it in another market; is that not true?

A. I will have to put it to you this way. They thought it did. That is why they took that action.

Q. In other words, Mr. Smith, is it not true that the displacement of cellophane by other materials was due to economic conditions in the sale of the product itself rather than any competition between the various wrappers?

A. Oh, I am not trying to try to answer that question. I am not going to even try to answer that question.

Q. You testified that the change in this instance and in various other instances was due to the fact that the cost of flour went up, or various other items, that went into the manufacture of the product, went up?

A. Yes. Yes, I did testify as to that.

Q. And that was the cause for cellophane being no longer used as a packager for wrapping white bread; is that true?

A. That was the primary reason why they started thinking in terms of the ways in which they could recover that very obvious increase in cost. Now of course I didn't agree with them, but they did the buying.

Q. And upon these changes in the bread industry, the
8877 bread was taken out of the cellophane market and put into another market?

Mr. GESELL. I must object. He is trying and trying and trying to use this market term, your Honor, for the purpose of creating legal conclusions which the witness——

Mr. RENNINGER. No.

Mr. MINICUS. We are not using the market term any more than the defendant used the term competition, which is just as much a legal conclusion, if not more so.

The COURT. Well, I will put a stop to both of you. Let me hear the question.

(The question was repeated by the reporter.)

The COURT. I don't understand that question. What other market do you mean, Mr. Renninger?

Mr. RENNINGER. In the wax paper market. If your Honor please, what the situation is here, we have the bread industry using cellophane——

The COURT. I think our difficulty lies in this case in the premises used, and that each of the contestants here is giving his own particular definition to certain words. Frankly, if I were on the witness stand, I would not know how to answer your question, Mr. Renninger, because I do not know what you mean by market.

Mr. MINICUS. I think your Honor has put his finger on it exactly. Not even the economists, when we are talking
8878 of economic theory, can agree upon the meaning of these words. But fortunately we are in a court of law, and the Supreme Court has defined these words, and they have lined up in a series of cases this entire situation of substitute materials. And that is why, Mr. Gesell to the contrary notwithstanding, we will never decide this on the facts alone; this issue will not be decided until it is applied to the law.

The COURT. Let us get that straight. You mean you don't decide cases on facts but on theory?

Mr. MINICUS. Absolutely, I did not mean that, your Honor. I mean this, sir, that the meaning of these words we are using now will only be found in the decided cases. And that is our difficulty; there is no generally accepted meaning——

The COURT. Make your best effort, Mr. Smith, to answer that question. Let us get along.

The WITNESS. I will answer it this way, and you may take your own interpretation, Mr. Renninger. When they went out of cellophane, they went into wax paper. Now call it what you want, sir.

By Mr. RENNINGER:

Q. But the reason that they went out of cellophane into wax paper was due to the rise in cost of the ingredients that went into the making of bread itself?

A. That was the reason that induced them to consider the
8879 necessity of the change. Later on I was able to get them to reconsider.

Q. In these early years, 1934 to 1936, when you were describing the baking industry, is it not true that you promoted the sale of cellophane for variety breads to a much greater extent than you did for white bread?

A. At that particular time?

Q. Yes.

A. Yes, that is true. That is true.

Q. And was this not due to the various extra factors in the white bread market as contrasted to the factors in the variety bread market?

A. The extra factors? I don't follow you, sir.

Q. Was the margin of profit greater on white bread or on variety bread to the baker?

A. Well, as a general thing, I suppose the margin of profit was lower on white bread; but it depended on who the baker was entirely.

8880 Q. Well, then, why did you stress the sale of cellophane on variety breads in the early years to a greater extent than you did white bread?

A. Simply because we had an opportunity to introduce largely, as I explained the other day, variety breads to the industry and provide a new profit opportunity for the industry, and we did it.

Q. Well, what were the factors in the variety bread market that caused this as compared with the factors in the white bread market?

A. That caused what, sir?

Q. You to concentrate on the sale of cellophane in the variety bread market rather than the white bread market?

A. Well, white bread, of course, has always been extremely competitive and variety breads were not at that time made, generally speaking. So from the practical business standpoint it was more logical for us to try to develop something which on the face of it was more profitable for any baker at that time. It was simply a matter of good sales management and judgment.

Q. As to all these various packaging materials, Mr. Smith, that you have been discussing how do they compare with the price of cellophane?

A. How do they compare with the price of cellophane?

Q. Yes.

8881 A. Most of them are lower in price.

Q. What products are lower in price than cellophane?

A. The papers are lower in price, glassine, wax paper, greaseproof, parchment.

Q. What about the transparent film?

A. They are, with the exception of the cellophane that is produced by Sylvania and Olin, they are generally higher in price.

Q. What about aluminum foil?

A. I believe that is higher.

Q. In other words, Mr. Smith, you have the papers that are lower in price than cellophane, and then you have cellophane that is next in price, and above that you have the transparent films; is that true?

A. You are speaking now of the cost to buy them?

Q. Yes, sir.

A. The cost to buy them; that is correct.

Q. Has this not always been the case, that cellophane has remained price-wise between papers and foil on one hand and the other transparent films on the other hand?

Mr. GESELL. He just testified it was the opposite. You have foil in your question. I don't think you intended it, Mr. Renninger.

Mr. RENNINGER. I would like to revise that question.

8882 By Mr. RENNINGER:

Q. Has it not always been the case, Mr. Smith, that cellophane has remained price-wise between the papers on the one side and on the other the transparent films and foil?

A. Yes, I think that is right.

Q. Mr. Smith, isn't it your opinion that cellophane will always be more expensive than various papers?

A. I have no opinion on that subject, sir. It involves matters that are far beyond my ken.

Q. Did you not make such a statement in a Dupont exhibit?

A. Did I say always?

Q. Didn't you say "In my opinion I believe that the papers will always be lower in price than cellophane"?

A. I may have, but also if I did I certainly qualified it by saying I believe; but you asked me to state if I know. I don't know.

Q. No, of course you don't. In your belief you feel that that——

A. Papers generally—I rather imagine that is a good possibility.

Q. In your experience as a cellophane salesman, Mr. Smith, and in your various managerial capacities what sales angles do you use in the sale of cellophane?

A. Mr. Renninger, I testified before that I have spent
8883 a good many years of my life trying to teach salesmen that they can't throw a blanket over industries or packaging problems as such, and if you will tell me the problem and the product and the circumstances surrounding it I will be glad to answer your question; but until you do I regret that I cannot.

Q. There are various characteristics of the product cellophane that you normally stress or the various cellophane salesmen stress?

A. Depending on what problem they find.

Q. In other words, it depends on the particular product to be wrapped?

A. Yes, it has to, and the problem involving the packaging of that product.

Q. And there are various types of cellophane itself that will meet certain packaging problems where another type of cellophane will not be as good; is that right?

A. That is correct. That is why we have so many.

Q. How do you feel that cellophane compares to these other flexible packaging materials with reference to protection?

A. There you have me again.

The COURT. From what?

Q. Moisture permeability?

A. There you have me again. What product are you talking about?

8884 Q. It would depend upon the particular type of cellophane; is that right?

A. And the product you are talking about and the conditions under which it is used and its length of turn-over on the market and the humidities or non-humidities to which it is exposed. I can't throw a blanket over that either, sir.

Q. Taking all the various protective qualities of cellophane as a whole, speaking generally, do you feel that the protection afforded by cellophane is equal if not superior to all the other flexible wrapping materials?

A. I am not going to answer that generally, sir. No, I will not be that general. I can't be that general and be intelligent in my answer.

Q. Do you feel that cellophane gives adequate protection, let us say, for the wrapping of cigarettes?

A. The cigarette manufacturer evidently thinks so.

Q. Do you think that the type of cellophane used for wrapping of red meats gives adequate protection for the length of time required?

A. Yes, we do.

Q. Do you feel that even P. T. cellophane that is used, when used as, say, a wrapper on stationery or napkins or something of that sort, does that give adequate protection?

A. Against what, sir?

Q. Against the needs for that particular package?

8885 A. Depending on what those needs are.

Q. I mentioned writing paper.

A. There are so many different angles to protection, Mr. Renninger.

Q. Yes, I understand that; I realize that, and that is why——

The COURT. Why don't we ask him a simple question?

By the COURT:

Q. Is P. T. cellophane satisfactory to wrap up napkins in?

A. We think it is, sir.

By Mr. RENNINGER:

Q. Are any of the other flexible wrapping materials better to wrap napkins?

A. Possibly, under some conditions, yes.

Q. What conditions?
A. I don't know what conditions.
The COURT. Ten-minute recess.
(At this point a brief recess was taken.)

By Mr. RENNINGER:

Q. Mr. Smith, before the morning recess we were talking about the protection of Dupont cellophane. I believe Dupont manufactures between 50 and 65 different varieties of cellophane; is that not correct?

8886 A. Something like that, yes, sir.

Q. Do you feel that as to each one of those 65 different varieties that the protection afforded by these types of cellophane is adequate for the use to which they are recommended?

Mr. GESELL. I object, your Honor. What is the meaning of "protection"? Moistureproof protection? Dust protection? What is he talking about?

Mr. RENNINGER. If your Honor please, the Dupont Company has about 65 different types of cellophane. They are recommended for use on various articles. Certain of these items are recommended for one particular article, others are recommended for another particular article. I presume that their use is recommended on the basis of the protection afforded by that wrapper.

Mr. GESELL. There is no proof about that at all. Now, what protection is he talking about, your Honor? so the witness will understand what he is supposed to answer.

The COURT. What do you have in mind, Mr. Renninger?

Mr. RENNINGER. Well, if your Honor please, I could go down each one of the different products that is wraped in cellophane and ask if the protection is adequate for that particular item. I am just trying to avoid that.

Mr. GESELL. I mean protection from what? Water? Flies? Housewives' fingernails? What is he talking about?

8887 Mr. RENNINGER. Whatever is necessary for the wrapping of that product.

Mr. MINICUS. There are 65 products for 65—65 cellophane wrapers for various purposes. If a wrapper is used on a particular product, a particular type of cellophane is used on a particular product, is that type of cellophane or does it give protection adequate for the product?

Now, if there are 65 wrappers of cellophane, your Honor, there are a great many products. Mr. Gesell's objection will finally drive us to the point where we will have to take each product and apply it to a particular wrapper. That is going to run into thousands.

The COURT. I am going to try to avoid that.

Mr. GESELL. So am I, your Honor.

The COURT. I think we can improve on the question to reach the desired result that you are after. I think in its present form the question may be objectionable because it is too general. But I think we can do it.

Will you read the last question, Mr. Reporter?

(The last question was read by the Reporter as follows:)

"Question: Do you feel that as to each one of those 65 different varieties that the protection afforded by these types of cellophane is adequate for the use to which they are recommended?"

8888 The COURT. I think that question is all right. I think he can answer it.

A. I will answer it this way: That in meeting a particular packaging problem there are a wide variety of conditions that we have to consider, and the film that we recommend for a particular problem is one that best meets our definition of that particular problem as to many factors, including protection, whatever that protection may be.

By Mr. RENNINGER:

Q. Mr. Smith, the Dupont Company advertises cellophane quite extensively, does it not?

A. Yes, we do.

Q. What are the main features stressed in these advertisements?

A. Are you speaking of consumer advertising now or trade advertising?

Q. I am speaking of all types of advertising.

A. Oh, they differ.

Q. Is it not true, Mr. Smith, that in practically every advertisement issued by the Dupont Company they stress protection?

A. Yes, we talk about protection a great deal insofar as the consumer is concerned, yes.

Q. What is meant by protection there?

A. Well, so far as the consumer is concerned we
8889 have wanted the consumer to believe, as we think she has a right to believe, that when she meets moistureproof cellophane or our various types of film in conjunction with the products that she buys that she will find them adequately protected.

Q. In other words, you feel that Dupont cellophane has good protection?

A. Yes, we think so.

Q. And in all these advertisements you always use the term "good protection", or "true protection", "adequate protection"; is that not true?

A. I would not say in all of them, no. That covers a lot of ground. Many of them, yes, I think we do.

Q. But you feel that Dupont cellophane has adequate protection?

A. I do. Many buyers don't, but I do.

Q. I believe you stated that you consider transparency also important in the sale of cellophane?

A. Yes, we do.

Q. In all these advertisements of the Dupont Company is it not also true that in practically every one of these advertisements the word "visibility" is used or words to that effect such as "true transparency," "true visibility," "see what you buy"; things of that nature?

A. I don't know that we ever used the words "true visibility" in all my experience.

8890 Q. "True transparency"?

A. I don't think we ever used the words "true transparency."

Q. You don't know whether you ever used it?

A. No, I don't know whether we ever used it or not.

Q. You don't know whether there is not already in evidence examples of the defendant's exhibits of the Dupont Cellophane Company using the words "true transparency", "true visibility," "see what you buy"?

A. Oh, "see what you buy," why, sure, we have been using that for years. That is one of the features of cellophane, Mr. Renninger.

Q. What about transparency?

A. That is what I am talking about. We try to sell transparency wherever we could possibly sell it intelligently.

Q. Do you ever stress the eye-appeal of cellophane?

A. Yes, I think we have.

Q. What is your definition of "eye-appeal"?

A. My definition of "eye-appeal" is that which appeals to the eye. I don't know any other.

Q. In what way does it appeal to the eye? You mean it is pleasing to the eye?

Mr. GESELL. Does what appeal to the eye?

Mr. RENNINGER. I thought we were talking about cellophane, or isn't it eye-appealing?

8891 The WITNESS. What is the question?

(The last question was read by the Reporter as follows:)

"Question: In what way does it appeal to the eye? You mean it is pleasing to the eye?"

A. You are speaking about the consumer now?

By Mr. RENNINGER:

Q. I am speaking about the consumer.

A. The buyer?

Q. The buyer.

A. What she thinks about the so-called eye-appeal of cellophane? Is that what you mean, sir?

8892 Q. No; I am speaking about what is the term generally known as eye-appeal?

A. Generally?

Q. In the packaging field.

A. I can't answer that question. I don't know what there is, what generally is known as eye appeal, in the packaging field, except that which appeals to the eye. Something that is attractive. That is the only way I can answer that, sir.

Q. Well, you say that you stressed eye appeal. What do you mean by that?

A. We mean the development of a package, when given the proper combination of ingredients, can be made up into an appealing package, that has appeal to the eye. That is, our eye.

Q. Is eye appeal something more than transparency?

A. Now you want my opinion now or the consumer's opinion?

Q. I beg your pardon.

A. Do you want my opinion as a seller or the consumer's opinion? I can't speak for the consumer.

Q. Well, I am only asking your opinion, Mr. Smith.

A. What is the question again now, please?

(Question repeated by the reporter, "Is eye appeal something more than transparency?")

The WITNESS. That is frankly a very difficult thing
8893 for me to answer, because eye appeal, from my own personal viewpoint——

Q. That is what we are asking.

A. Is a subconscious reaction. I either think something is appealing or I do not, and I really don't know why.

Q. What is meant by highlights?

A. Highlights?

Q. Yes.

A. Well now, let me think a minute now. Now you have got me. I know what you are driving at, but I am trying to describe it. Are you speaking of when the light reflects on the cellophane?

Q. Yes.

A. Is that what you mean?

Q. I am asking your definition of highlights.

A. Well, a highlight is a high point in something, that reflects light.

Q. Do you feel that cellophane has highlights?

A. Under what conditions? Under many conditions, no, definitely no. Under some conditions, yes, I think so.

Q. Do you feel that highlights is a part of eye appeal?

A. I have never thought of it that way, frankly. From the practical standpoint, I have never thought of highlights as a part of eye appeal. As a matter of fact, I can't break down the ingredients of eye appeal from a practical standpoint,
8894 sir.

Q. Do you feel that cellophane has eye appeal?

Mr. GESELL. I object, your Honor. I think it is time we found out the relevancy of something.

The COURT. Let us leave eye appeal alone for a while. Let us get to the point. Furthermore, may I make this inquiry—and I am asking for help, MR. Renninger; I mean I am not criticizing you—what is the purpose of this line of examination?

Mr. RENNINGER. If your Honor please, we are trying to bring out the various characteristics of cellophane, your Honor.

The COURT. I feel that after a year and some months I know something about the qualities of cellophane. But I can't see the purpose of bringing out the qualities of cellophane on cross-examination of a man whose function is to sell his product.

Mr. RENNINGER. If your Honor please, I am trying to find out what he is trying to stress in the sale of his product.

The COURT. Why couldn't you ask him that simple sentence?

Mr. RENNINGER. I did ask him that.

The COURT. And then let him recite for one minute or ten or twenty-five?

Mr. RENNINGER. All right.

8895 The COURT. Let us put it to him. Mr. Smith, what are the qualities of your product which you urge upon your customers? Now let us get along.

The WITNESS. Is that question?

Mr. RENNINGER. Well now, I want to answer it this way. If you are asking me, Mr. Renninger, whether or not we think that someone can use cellophane and make it into a beautiful, appealing package, I will be very happy to answer, we most certainly do, with the proper combination of ingredients.

By the COURT:

Q. For example, at Christmastime you have red cellophane; right?

A. That is correct. And if a product happens to be one that has a particular lot of appetite appeal, we think transparency helps there. But don't ask me how I approach customer J with his problem, because I can't tell you. I don't know Customer J.

By Mr. RENNINGER:

Q. You sell then according to particular end use that the particular product is to be used for?

A. We sell on the basis of finding a problem, taking its ingredients, laying them out before them, seeing what we can do about it, and then we try to progress from that point.

Q. I believe you stated, Mr. Smith, that with the increase
8896 of self-service store impulse buying has been of great importance in the development of that market?

A. As we term impulse buying, yes, that is true. Or vice-versa. We don't know which came first, the chicken or the egg.

Q. In other words, visibility is important and eye appeal is important in self-service stores?

A. You can't sell a package today unless it is attractive.

Q. Do you consider visibility important?

A. I always have.

Mr. GESELL. May I inquire, your Honor, whether visibility is something different from transparency or whether he is just talking about transparency?

The COURT. I think he means both, don't you?

Mr. RENNINGER. Yes, I mean both. I am trying to get out from the witness a question of the highlights and the eye appeal and the various factors.

Mr. GESELL. Fine.

Mr. RENNINGER. But we will pass that.

By Mr. RENNINGER:

Q. Do you consider cellophane to be a separate product from wax paper and glassine?

A. You mean is it a different product?

Q. Yes.

A. Sure, it is a different product.

8897 Q. Do you think it is a unique product?

A. Unique as to what, sir?

Q. Unique——

Mr. MINICUS. Just a minute. Pardon me, your Honor.

The COURT. No; I think that is a proper—

Mr. MINICUS. He testified on direct, your Honor, that he had no idea what was meant by unique.

The WITNESS. Well, I still don't.

Mr. MINICUS. And he testified on direct that it was a unique product, and now he is asking, unique as to what?

The COURT. I will settle the difficulty. I will ask the question—what do you mean, Mr. Renninger, by unique? Unique for what?

Mr. RENNINGER. A separate, distinct product.

The COURT. For what?

Mr. RENNINGER. Having unique, separate characteristics.
The COURT. For what?
Mr. RENNINGER. For packaging.
The COURT. All right.
The WITNESS. No more than any other product.

By Mr. RENNINGER:

Q. But it has certain characteristics that other products do not have; is that true?

A. Oh, yes. Yes, indeed.

8898 Q. And depending upon consumer preference as to what product is used?

A. You mean using the word consumer——
Q. Whether glassine or wax paper?
A. You mean now the buyer, do you?
Q. Yes.
A. Yes, the buyer decides what he wants to use.
Q. Do you consider cellophane to be an essential wrapper in the national economy today?
Mr. GESELL. Your Honor, I can't object to this; I am going to have to leave it to the Court as to whether it has anything to do with the case.
Mr. RENNINGER. I think it does, your Honor, as I will develop here a little later.
The COURT. All right, proceed.
The WITNESS. Will you repeat the question, please?
(Question repeated by the reporter, "Do you consider cellophane to be an essential wrapper in the national economy today?")
The COURT. I don't think the world would come to an end if they didn't have it.
Mr. MINICUS. We have a line of proof on this, your Honor.
The COURT. You do?

Mr. MINICUS. Yes.

8899 The COURT. What is your offer of proof?

Mr. MINICUS. The presentation made by the Dupont Company to the National Production Authority that they had to have raw materials for cellophane because it was essential to the economic life of the country.
Mr. GESELL. The question is what has that to do with this monopoly case?
Mr. MINICUS. I think we should have an opportunity to develop that, if your Honor please.
The COURT. Very well, proceed.
The WITNESS. Do I consider it essential you say?
Mr. RENNINGER. Yes.

The WITNESS. To the National Economy? Well now, I am going to have to answer you this way, which is the only practical way, I think, this can be answered, that at any given time a great number of people in this country who use packaging materials use cellophane; they have investments in materials and in machinery and many other factors that relate to a well established packaging line, and at any one time they may consider it essential.

The COURT. You see our difficulty throughout this whole morning has been that we are not defining our terms. Now take the word essential. Essential to whom?

Mr. RENNINGER. That was the ruling of the NPA, your Honor.

The COURT. I don't care what the ruling was. For
8900 my purposes, essential to whom? Now Mr. Smith has got an idea here; he says it is essential to the converter, for example, who has got a heavy investment. If you take away his cellophane, he is going to have losses. But let us be more precise.

Mr. RENNINGER. That is our next question, your Honor.

The COURT. All right, proceed.

By Mr. RENNINGER:

Q. If cellophane is essential or is not essential——

The COURT. Now essential to whom?

By Mr. RENNINGER:

Q. To the converter,—is it essential to the consumer?

A. Now you say if it is essential to the converter?

Q. I think you stated that you felt it was essential to the converter.

A. I said there were some concerns.

Q. All right; answer the other question.

A. Well, let me answer it this way. If the converter feels that because he has at this moment a business that has been built up around cellophane, if he is deprived of it at any one given time, obviously, he is in bad shape until he is able to change his business. That is simple.

Q. Did not the Dupont Company on Friday, June 8, 1951, invite a group of officials from NPA to hear a discussion graphi-
8901 cally illustrated by charts on the essentiality of cellophane in the civilian economy?

A. I believe so, yes.

Q. Didn't you have something to do with that?

A. I had nothing to do with that personally, no.

Q. Is Mr. H. C. Broemes under you?

Q. Is Mr. H. C. Brosmes under you?

A. No, sir.

Q. What capacity does Mr. Bromes represent in the Dupont Company?

A. Mr. H. C. Broemes is our associate director of sales, in the same capacity that I have, and his responsibilities are the inside and staff functions of the business as they relate to sales.

Q. Didn't the Dupont representatives ask the NPA to declare cellophane essential and request that that agency be of assistance in obtaining adequate supplies of the necessary raw materials for the manufacture of cellophane?

A. They may have.

Q. Do you recognize this booklet, Mr. Smith? Have you ever seen this booklet before?

A. May I see it, please?

Mr. RENNINGER. I would like to have this booklet marked as "Government's Exhibit 6002" for identification.

(Booklet entitled "Cellophane" was marked "Plaintiff's Exhibit No. 6002" for identification.)

The COURT. So that I can follow this examination, may I see it before you give it to the witness?

8902 (The booklet was handed to the Court, and then to the witness.)

The WITNESS. Yes, I have seen this before.

By Mr. RENNINGER:

Q. Is this not the booklet that was distributed at this luncheon meeting to the members of the National Production Authority in support of their——

A. I believe it is. I believe it is, yes.

Q. Does not this booklet say that cellophane is a protective packaging film essential to today's national economy?

A. That is what it says.

Q. Do you agree with that?

A. I believe it is essential to the economy in this sense, that people such a converters who have built up a business around it would find it an essential material, yes.

Q. Is that the main consideration used in this booklet?

A. I don't quite understand that, sir.

Q. Is it not true that the main theme of this booklet is its use as a protective packaging for food products?

A. I believe so.

Q. And tobacco products?

A. I believe so.

Q. Does not this booklet purport to explain why the Dupont Company feels cellophane is an essential material?

A. I believe it does.

8903 Q. The statement is made in the booklet, "Cellophane as a packaging medium helps to market food products by keeping it clean, preserving its original freshness, and by per-

mitting examination of merchandise before purchase. The rapid growth of self service meats is a good example where a special transparent wrapper is essential." Do you agree with that statement, Mr. Smith?

A. Well, there are two statements there. Which one?

Q. Both of them. Take one separately, if you disagree with it.

A. Yes, I think that is a fair statement of fact.

Q. Another statement appears, "A transparent flexible film is as important in the pre-packaging of produce as it is with self service meats." Do you consider that a true statement?

A. At the moment that is true, yes.

The COURT. Mr. Renninger, will you fix the publication date of the document for me?

Mr. RENNINGER. I don't believe the document has a publication date, your Honor.

The COURT. Well, ask the witness if he knows.

By Mr. RENNINGER:

Q. Do you know the date of this publication?

A. Actually, I do not. It was some time last year.

Q. But this was presented and distributed to the members of the National Production Authority in June of 1951 in an
8904 endeavor to have the National Production Authority declare cellophane essential; is that not true?

A. Yes, as opposed to products which they consider non-essential; and there was a matter of judgment.

Q. I did not understand your answer.

A. I say as opposed to what they considered non-essential.

Q. The statement appears in there that of the five thousand cellophane customers, small business represents 98%, using approximately 22% of cellophane volume; the so-called large companies are but 2% of the number of users. Is that a correct statement?

A. I did not prepare those figures and I have no way of analyzing them, but I would not be prepared to disagree with it.

Q. In other words, though, the large companies representing 2% of the number of users use 78% of the cellophane manufactured by Dupont?

A. If those figures are correct, then that is correct.

Q. Another statement is, "57% of cellophane production is sold direct to end users such as bakers, meat packers, etc.; the remainder of 43% goes into indirect channels, the converters and fabricators." Do you feel that that is approximately correct?

A. Yes, I think so.

Q. The article ends in this manner, "To sum up,—
8905 cellophane is a protective packaging material essential to today's national economy for the following reasons:

"1. It keeps food fresh, conserves quality and prevents waste important to the public health and welfare.

"2. It protects basic foods such as bread, meat, produce, cheese, frozen foods, etc., as they are moved through modern channels of distribution. These items are kept fresh and sanitary throughout the entire cycle from manufacturer or producer to the consumer.

"3. It cuts down food handling costs and, by aiding self service, helps conserve manpower.

"4. It is low in cost and economical to use. Because of high yield per pound, it aids in conserving essential raw materials.

"5. It serves important military uses,—is already included in over 50 government military specifications.

"To sum up, cellophane is a protective packaging film essential to today's national economy."

Do you agree with that statement, Mr. Smith?

A. In the summation statement, I agree with it, in this respect, that we were trying to establish the essentiality of cellophane as opposed to what was considered to be a feeling that it was not essential.

Q. Mr. Smith, do you not feel that wax paper or glassine could adequately take the place of cellophane during the national emergency?

8906 A. Immediately? From a practical standpoint, you are covering a lot of ground, sir. Some uses, yes. Other uses, no.

Q. There are some uses for which they would not be satisfactory; is that right?

A. Yes. We think so.

Q. In other words, then, there are many uses in which glassine and wax paper would not be adequate in case of a shortage of cellophane?

A. We think so, yes.

Q. In other words, you feel that cellophane is an essential commodity and nothing else will take its place?

A. No, I didn't say that at all.

Q. Well, what would you say?

A. I would say that cellophane, where it is used in a particular product, and that it is doing a job, is considered by those who are using it at the time what they want and therefore essential in their view.

Q. Does that not make a market for cellophane?

A. Anybody that buys cellophane, in our opinion, makes a market for cellophane.

Q. In other words, then, there is a cellophane market?

A. There are places where we sell cellophane, and that is what we call the cellophane market.

Q. If none of these other wrappers would take the place of cellophane, would that not be a cellophane market?

8907 A. You are speaking of wax paper?

Q. Yes; and glassine.

A. Are you asking me if wax paper might be used to wrap red meat and keep the color? Is that what you mean?

Q. You could use that as an example.

A. No, they can't. Everybody knows that.

Q. Any other example?

A. Probably. Probably.

Q. I am trying to get what you mean, Mr. Smith, because to the NPA you are saying that cellophane is essential to the national economy, and I am just wondering whether the Dupont officials and you yourself agree with that.

A. Well, let me put it to you this way, that what we said at that time in an attempt to justify our product in the minds of the National Production Authority was to point out our views as to the practical ways in which cellophane does fit in as of this moment into the national economy.

Q. As an essential article?

A. Anything that at the moment fits in has its degree of essentiality, yes. Now how long it would have to remain so, we don't pretend to say.

Q. I just don't understand the discrepancy between what you are saying here and the presentation to the NPA.

A. In what respect don't you understand it, sir?

Q. You are qualifying that whether cellophane is or is

8908 not essential or whether these other products could not take its place.

A. Just as a matter of time, that is all.

Q. You mean in a matter of time these other products could take its place?

A. There are other products used, Mr. Renninger, in every place where cellophane is used, to my knowledge.

Mr. GESELL. Excuse me, your Honor. May I direct your Honor's attention to Page 12 or GX-6002 for identification?

8909 Mr. MINICUS. Your Honor——

The COURT. Wait, just give me a chance, Mr. Minicus.

Mr. MINICUS. Mr. Gesell——

The COURT. Wait a minute. Mr. Gesell asked me to read something.

Mr. MINICUS. Couldn't he have done that on redirect, instead of in the middle of Mr. Renninger's cross-examination?

The COURT. Proceed, Mr. Renninger.

By Mr. RENNINGER:

Q. If, as you say, these other wrapping materials in time could

be used as a flexible wrapping material and the raw materials going into the manufacture of cellophane are more critically needed for the war effort, couldn't you have just asked for enough raw materials or critical materials to last until the other flexible packaging materials could have taken its place?

Mr. GESELL. Objection.

A. I can't answer that question. I can't answer that question.

By Mr. RENNINGER:

Q. Mr. Smith, cellophane either is essential or is not essential.

A. We think it is essential to those particular uses for what it is used for.

8910 Q. Isn't it used for quite a number of uses?

A. Oh, yes.

Q. Isn't quite a large tonnage of cellophane sold?

A. Yes.

Q. So there is quite a number of uses then?

A. Yes.

Q. Do you know whether the National Production Authority considered cellophane essential or not?

A. I don't know.

Q. Isn't it true that they did?

A. I can't answer that either.

Q. Do you know the make-up of the National Production Authority?

A. No, sir, I do not.

Q. Do you not know that there is a special section set up in the National Production Authority to deal with cellophane exclusively?

A. Yes, I believe I have heard there was.

Q. Do you know who is the head of that section?

A. No, I do not.

Q. Is it not true that all problems relating to cellophane are handled by this section, all problems of cellophane in the national economy handled by this section?

A. In the national economy?

Q. What is the National Production Authority for?

8911 A. I have often wondered. I don't know.

Q. Do you not know that there is this special section in the National Production Authority to handle cellophane matters?

A. I have understood that, yes.

Q. Mr. Smith, I believe you stated that in the meat industry it can be broken down into main categories: Fresh meat and processed meat, processed meat including bacon, picnics, ham, sausage, specialties, and things of that sort; is that true?

A. Yes.

Q. I think you also stated in the early days the meat packers in the use of cellophane on bacon were able to charge a premium of from 4 to 5 cents on a package wrapped in cellophane over a package wrapped in some other material to the extent that they could get it. Well, what factor in the market enabled the meat packer to obtain a premium for a cellophane wrapped package?

A. I can't answer that frankly as to what factor in the market. I think that we were able to induce the meat packing industry that they ought to have a different package, and I think that they agreed that perhaps that would be a good addition to their line; but they said inasmuch as it costs as much as it does, somebody is going to have to pay for it, so they charged for it.

8912 Q. But there are certain type of people that buy or pay that premium of 4 to 5 cents a pound for bacon wrapped in cellophane?

A. Well, that is an extremely difficult question to answer.

Q. I don't see where it is extremely difficult for you to answer. If you sold any of it they must have paid the extra premium.

A. I will tell you why it is extremely difficult, if you will bear with me just a moment. The meat packing industry sold their products to the dealer; the dealer in turn put his own price on them. Obviously if he bought something at one price and he paid a premium over the other, he would try to get that much more from the consumer, that is true. But it wasn't at all unusual for a dealer or a butcher in those days to buy bulk bacon and in many cases charge more for it. Not at all unusual. It was very, very common.

Q. I don't understand this line of testimony, Mr. Smith. On direct examination you stated that the meat packers could get 4 or 5 cents premium in cellophane over bacon wrapped in other wrappers.

A. To the extent that a very limited number of dealers would be willing to pay it. That is one of the reasons why they were never able to sell very much.

Q. Oh, they didn't sell very much of it.

8913 A. No. I told you that. I said our market was very limited.

Q. But there was a market? Some people were willing to pay that extra amount of money?

A. There was some sold; that is correct.

Q. Why do you feel that they were willing to do that?

A. I don't know. I guess they thought it was a better buy.

Q. I believe you also stated that as to the processed meat market as a whole that Dupont lost out for various reasons in this market, one of them being the lower price charged the meat packers by the Sylvania converters; is that right?

A. That is what I said.

Mr. MINICUS. Your Honor, I would like to have a moment to consult with Mr. Renninger.

The COURT. Certainly.

By Mr. RENNINGER:

Q. Mr. Smith, I believe you stated just a few minutes ago that very little bacon was sold at an advanced price when wrapped in cellophane over bacon wrapped in other articles; is that true?

A. Comparatively speaking, yes, I think that is right.

Q. There was a very small amount?

A. In relation to the whole, that is correct.

8914 Q. What about the Armour Company?

A. What do you mean what about it?

Q. Did the Armour Company have large sales of bacon wrapped in cellophane that it sold at a premium?

A. Large sales?

Q. Yes.

A. Well, they sold a lot of bacon, but they sold more bacon that was not wrapped and more bacon yet that was put in parchment and greaseproof.

Mr. MINICUS. Your Honor, this is the point exactly. Mr. Elmstrom of the Armour Company on deposition testified that 80 per cent, roughly of Armour's bacon was sold in a cellophane package and that a very small amount was sold wrapped in anything else. In other words, this Tradepak of Armour represented about 80 per cent. of the processed bacon they sold. That does not appear, to the best of my recollection, in any of these analyses or anything else, and we have no way of getting it on the record.

Mr. GESELL. One of these two lawyers examined the witness, if your Honor please. What kind of performance is this? If they have something they want to bring out from the witness, why don't they ask him? If they want to introduce the deposition in evidence why don't they produce it?

Mr. MINICUS. I am not addressing myself to the witness at all; I am simply pointing out the difficulty we are

8915 under——

The COURT. There is no difficulty. You take the deposition and you read what the deponent said, and you ask the witness "Do you agree or not agree with that?" It is as simple as that.

Mr. GESELL. Precisely.

The COURT. Get the deposition of the witness and read the testimony of the deponent to the witness, and then ask the witness if he agrees or does not agree. Let us get at the facts.

Recess to 2 o'clock.

(At this point a recess was taken until 2 o'clock, p. m., the same day.)